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ABSTRACT

Designed for use by coordinators of disabled student services at New York State two-year colleges, this sourcebook represents a compendium of ideas, recommendations, facts, problems, and solutions related to serving disabled two-year college students. Introductory remarks describing the sourcebook's purpose and New York's Disabled Student Project are followed by background information regarding concerns and resources, trends and projections, and barriers to working with disabled students. Subsequent sections cover: (1) the legal rights of disabled students as stated by Section 504 of the Rehabilitation Act of 1973; (2) identification of disabled students; (3) attitudes of and toward disabled individuals; (4) access and safety concerns, such as program accessibility, barrier-free design, adapted equipment and techniques, laboratory safety practices, evacuation of disabled persons, first aid, and access to vocational education; (5) instructional accommodations for disabled students including those with mobility, emotional, learning, visual, speech, and hearing impairments; (6) career planning issues, including affirmative action, equal employment rights, job training, employer concerns, and tips for job seekers; (7) selected programs, projects, and publications of specific community colleges in the state; and (8) information resources, including organizations and associations, periodicals and newsletters, audiovisual materials, media distribution centers, funding sources, and resource centers. (LL)

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# S O U R C E B O O K

## DISABLED STUDENT SERVICES

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## FORWARD

In the course of conducting the Disabled Student Project at selected New York State two-year colleges, we repeatedly encountered faculty, staff, and disabled students who expressed the need for a pulling together of information on disabled students and disabled student services. This Sourcebook is the culmination of our efforts to address that need.

The Sourcebook is not an exhaustive compilation of current thinking on disabled students. Rather, it represents a sampling of practical information for use by coordinators of disabled student services at New York State two-year colleges.

We are deeply grateful to our many colleagues and friends who contributed to the development of the Sourcebook. Special thanks go to the publishers for granting us permission to reproduce material from their publications; to Dr. Gene Winter, Director of the Two-Year College Development Center, and to the members of the Project Advisory Committee for guiding us through the many phases of the project; to the faculty and staff at the participating two-year colleges for sharing with us their expertise and experiences in serving disabled students; and finally, to the disabled students themselves for helping us achieve a better understanding of their special needs, concerns, and problems.

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# INTRODUCTION

*A person with a disability is--first and foremost--a person.*

*— New York State Office of the Advocate for the Disabled*

## PURPOSE

This Sourcebook of Disabled Student Services is the final product of the Disabled Student Project, a research and development effort conducted by the Two-Year College Development Center, State University of New York at Albany, in cooperation with the Bureau of Grants Administration, New York State Education Department.

The Sourcebook is designed as a resource guide for use by coordinators of disabled student services at New York State two-year colleges. It represents a compendium of ideas, recommendations, insights, facts, suggestions, problems, and solutions for serving disabled students enrolled in two-year college programs.

The Sourcebook is divided into 10 sections. The sections on Introduction, Background, Law, Identification, and Attitudes provide the reader with an overview of the Disabled Student Project as well as an orientation to the process of ensuring the participation of disabled students in postsecondary education programs. The section on Access and Safety addresses the important issue of accessibility--both physical and programmatic--for disabled students on today's college campuses. The next section, Instruction, presents a variety of disability-specific tips, techniques, methods, modifications, and adaptations to assist faculty in accommodating the instructional needs of disabled students. The section on Career Planning contains advice for staff involved in the career planning and job placement of disabled students. Campus Publications features a sampling of noteworthy disabled student services, projects, programs, and publications developed at selected colleges and universities. The final section, Information Resources, is intended as a potpourri of informational resources, materials, and organizations relating to disabled students and disabled student services.

The choice of these sections and the material contained therein was guided primarily by the results of our surveys of and discussions with faculty, staff, and disabled students at selected New York State two-year colleges. The actual decision to include an item in the Sourcebook was made on the basis of its length, currency, representativeness, and practicality. Many of the items in the Sourcebook have appeared in other publications, and are reproduced here with permission of the publishers. Each of these items is accompanied by a source note for those readers interested in obtaining further information from the original source.

Most of the pages in the Sourcebook have been reduced in order to accommodate as much information as budgetary constraints would allow. We sincerely hope this compromise neither inconveniences the users of this Sourcebook nor limits the dissemination of its material.

## THE DISABLED STUDENT PROJECT

From October 1, 1980 to December 31, 1982, the Two-Year College Development Center, State University of New York at Albany, with support from the Bureau of Grants Administration, New York State Education Department, conducted a project to examine the extent and quality of selected accommodations and services currently available to disabled students enrolled in postsecondary occupational education. Specifically, the project was designed to address the following objectives:

- Obtain demographic data from disabled students enrolled in occupational education programs in selected New York State two-year colleges;
- Identify the instructional problems encountered by those students;
- Determine student experience with and evaluation of selected instructional accommodations;
- Determine occupational education faculty use of selected instructional accommodations and the extent of their experience in teaching disabled students;
- Inventory the career development and job placement services available to disabled students currently enrolled in New York State two-year colleges; and,
- Develop a sourcebook for two-year college faculty and staff containing information on instructional accommodations, programming approaches, and support services available to disabled students in New York State two-year colleges.

These objectives were addressed through four research components.

### Component #1: Survey of Disabled Students

During the 1981 spring semester, a total of 171 disabled students enrolled in occupational education programs at 19 two-year colleges completed the Instructional Accommodations Inventory, a survey instrument designed to determine their experience with and evaluation of 36 special accommodations. An accommodation was defined as any modification in method, technique, aid, device, service or practice that enables a disabled person to participate in an academic setting. Student responses to the questionnaire items on major program area, instructional problems, and frequency of use, relative importance, and perceived availability of accommodations were analyzed for each of eight separate disability types as well as for the overall sample. Separate site reports were prepared for each participating college. Detailed research results are available in the publication "Beyond Access: Meeting the Instructional Needs of Handicapped Students in Postsecondary Occupational Education." The following were among the findings of the survey of disabled students:

- The methods used by the colleges in the study to identify disabled students were at best inadequate. As a result many disabled students remained unidentified and consequently unaware of accommodations and services available to them.
- The typical disabled student in the sample was over 21 years of age, not employed, attending college on a full-time basis, enrolled in day classes.
- The occupational education program most preferred by both male and female disabled students was Business and Office Education.
- The predominant type of disabled student in the sample was the mobility disabled. This was followed by the multiple disabled and the hearing disabled.
- Most disabled students indicated that they were receiving agency assistance, particularly from the Office of Vocational Rehabilitation and from Social Security.
- The special instructional problems selected by the largest number of disabled students included "time limits on exams," "lab/shopwork," "discussion classes," and "large lecture classes."
- "Better notetaking skills" and "instructors with better lecture and chalkboard techniques" emerged as priority needs for many disabled students.
- The use of an accommodation by a disabled student was found to be a function of the nature and extent of the student's disability, the willingness of the student to use the accommodation, the availability of the accommodation, its applicability to the needs of the student, and its importance as perceived by the student.
- Most disabled students surveyed had never used many of the 36 accommodations.
- The accommodations with the highest percentage of use included "Extra Personal Help," "Tutors," and "Tape Recorders."
- The accommodations given the highest ratings of importance were those with an interpersonal or human contact component.

- The largest number of separate accommodations had been used by the visually disabled and by the multiple disabled students; the highest frequency of use of accommodations was noted by the visually disabled and by the learning disabled students; the highest ratings of importance of accommodations were given by the speech disabled and by the multiple disabled students.

- The primary providers of accommodations included colleges, agencies, and the disabled students themselves.

Component #2: Survey of Faculty

During the 1982 spring semester, representatives from 17 two-year colleges agreed to survey a sample of their occupational education faculty using the Disabled Student Project Faculty Questionnaire. Analyses of the 817 completed questionnaires provided colleges information on faculty (a) awareness of sources of information about disabled students, (b) use of special accommodations for disabled students in their classes, (c) ratings of importance and need for information on 20 activities/skills/competencies related to teaching disabled students, and (d) preferences for certain activities in order to learn how to better accommodate the instructional needs of disabled students. Once again separate site reports were prepared for each participating college. Detailed research results appear in the report, "Disabled Student Project: Faculty Survey." The survey of faculty revealed that:

- The typical faculty member in the sample held a Master's Degree, had been in teaching for 11 years or more, and was teaching on a full-time basis, during the day, in a combination of classroom and shop or laboratory settings.

- The majority of faculty indicated having had limited exposure to disabilities. Most reported having neither personal disabilities nor family members or close friends who were disabled.

- Over three-fourths of the faculty had taken no special education courses.

- The majority of faculty estimated that less than one percent of the students they taught per semester were disabled.

- The most common types of disabled students the faculty had encountered in their classes included the mobility disabled, the emotionally disabled, the visually disabled, and the learning disabled.

- The primary campus sources of information on disabled students were noted by the faculty as including "word-of-mouth," "the college newspaper," "various memoranda," "the coordinator for disabled students," and "bulletin board notices."

- "Extra Personal Help" was the accommodation that had been provided for disabled students by the largest number of faculty. This was followed by "Tutors," "Different Time Allotments," "Different Exam Formats," and "Tape Recorders" (allowance of).

- The activities/skills/competencies given the highest ratings of importance by the faculty were those concerned with maintaining safety and academic standards in teaching disabled students, helping disabled students develop positive attitudes about themselves, having appropriate materials and equipment for instructing disabled students, and learning how to better relate to disabled students.

- The majority of faculty expressed a need for more information about (a) strategies, materials, and equipment for teaching disabled students; (b) special techniques for teaching disabled and nondisabled students in the same classroom; and (c) the psychological and behavioral effects of various types of disabilities upon disabled students.

- The activities preferred by the largest number of faculty to foster improved understanding of disabled students included inservice workshops, videotaped materials, and classroom observations of other instructors working with disabled students.

Component #3: Survey of Career Development and Job Placement Services

Concurrent with the survey of faculty, a survey of career development and job placement services for disabled students was undertaken during the 1982 spring semester. Copies of the Disabled Student Project Career Development and Job Placement Survey were sent to the Placement Directors at 54 New York State two-year colleges. Completed questionnaires were received from 39 colleges, including all six SUNY Agricultural and Technical Colleges, 25 of 31 SUNY Community Colleges, two of eight CUNY Community Colleges, and six of 10 private two-year colleges. The findings include data on (a) the availability of 23 types of career development and job placement services for disabled students, (b) the numbers of disabled students served by college placement offices during the 1980-81 academic year, (c) the degree of involvement of various college staff in the career development and job placement of disabled students, and (d) the problems encountered and solutions developed by placement staff in addressing the career development and job placement needs of disabled students. The survey results indicated the following:

- Although all colleges stated that career development and job placement services were available to all students, few had implemented specialized services for disabled students or had kept separate records on the use of services by disabled students. Three-fourths of the placement offices surveyed indicated that no special techniques were used to identify disabled students.

- Low staff-to-student ratio was the reason most frequently cited by the respondents to explain the lack of development of special career and placement programs for disabled students.

- Nearly half of all placement offices surveyed reported having served between 15 - 50% of all students during the 1980-81 academic year. The proportion of students served who were identified as disabled ranged from less than 1% to 5%. Approximately one-fourth of the respondents reported that the number of disabled students served by placement staff was unknown.

- The career development and job placement services with the "highest" availability (i.e., offered by at least 75% of the responding sites) for both disabled and nondisabled students included "Career Information Resource File," "Resume Preparation," "Interview Techniques," "Job-Hunting Techniques," "Career Planning Courses and Seminars," "Job Referrals," "On-Campus Recruitment by Prospective Employers," and "Vocational Interest Tests."

- The one service with "high" availability to all students but with "medium" use by disabled students was "Follow-Up of Students Placed."

- Ranked in order of involvement, Counselors, Placement Staff, and OVR Personnel were noted as being most frequently involved in the career development of disabled students; whereas Placement Staff, Counselors, and OVR Personnel were reported as being most frequently involved in the job placement of disabled students.

- The primary barriers to more effective career development and job placement services for disabled students cited by the respondents were: college staff shortages, employer resistance to hiring disabled persons, transportation problems, and inappropriate/unrealistic career goals coupled with disincentive to work and lack of job readiness on the part of disabled students.

- "Workshops," "Computerized Guidance Systems," and "Worksite Vists" were among the solutions that had been developed by several respondents to help overcome some of the barriers listed above.

- Respondents expressed a need for additional information on job search/job readiness training for disabled students as well as a need for listings of resources for serving disabled students and agencies willing to hire disabled students.

Component #4: Development of Sourcebook

The compilation of information on instructional accommodations, programming approaches, and support services for disabled students in two-year colleges was an ongoing activity, conducted throughout the duration of the project. The materials were subsequently grouped into sections including law, attitudes, instruction, career planning, campus publications and projects, and information resources, and were published in a Sourcebook for providers of services for disabled students in postsecondary education. The Sourcebook was distributed to the Coordinators for Disabled Students at all two-year colleges in New York State.

Summary

The Disabled Student Project, managed by the Two-Year College Development Center in conjunction with two-year colleges in New York State, provided postsecondary faculty and staff information about disabled students to assist them in revising policies and developing programs to better meet the academic needs of this population.

* * *

# BACKGROUND

*In the late 1960's it was Title VI; in the early 1970's it was Title IX....Today it is Section 504.*

*— Frank Bowe, Director of the American Coalition of Citizens with Disabilities*

HEATH/Closer Look
RESOURCE CENTER
a program of the American Council on Education

Higher Education and the Handicapped / Closer Look Resource Center—a national clearinghouse on postsecondary education for disabled people • Post Office Box 1492, Washington, DC 20013 202/833-4707 (Voice/TTY)

# COMMUNITY COLLEGES AND HANDICAPPED STUDENTS CONCERNS AND RESOURCES

Administrators and student service providers at many community colleges have responded with imaginative and cost effective programs to assure that large numbers of disabled students can enrich their lives and increase their career options through education and training. More than one third of the nation's postsecondary institutions are community and junior colleges. Surveys of the American college freshman by the American Council on Education show that over 50% of handicapped students enroll for credit in two year schools, a vast majority of whom choose public institutions. In addition, more enroll in the many non-credit "life enrichment" courses which community colleges offer. The Rehabilitation Act of 1973 and especiallly the Regulation concerning Section 504 enhances the opportunity for many disabled people to pursue postsecondary education, many of whom try this first at their local community college.

This fact sheet will help those responsible for effectively serving the college and community—especially trustees, presidents, deans of students, faculty, disabled student service coordinators, and other staff. Community colleges are moving beyond the bricks and mortar of achieving physical accessibility and, in the face of the current budget crunch, must focus on ways of meeting community needs in an efficient manner.

In the following pages some community college concerns have been indentified for discussion. Resources which could be useful in planning and choosing options are listed. The final section provides the names of selected experienced community college disabled student service leaders who might advise on particular ideas.

## COMMUNITY COLLEGE CONCERNS

### Where to Begin

Whether a campus is taking a first look at how to make its program and facility accessible or reordering priorities in the face of fiscal crises, the most important step is to name an Advisory Board on which to depend for balanced judgement. Such a Board should include representatives from various campus functions: student service, academic affairs, physical plant, and library. In addition, disabled persons, some of whom are students, should be included to assure that ideas for making the campus accessible are both necessary and cost effective. It is especially important to include leaders of such community resources as Vocational Rehabilitation Services, Vocational Education Department, Centers for Independent Living or organizations of disabled people, and the Mayor's (or County Councilor's) office. Input from a broad range of interests can assure a campus administrator of developing a realistic plan.

### Appropriate Utilization of "Open Door" Policy for Handicapped Students

"Open Door" refers to the policy in a number of states which permits anyone who is a high school graduate (or equivalent) OR is eighteen years old to enroll in a community college. This policy has the potential for bringing in large numbers of students, both able bodied and handicapped, who are incapable of doing college work as it is generally understood. Several of the most serious concerns include:

To what extent must support services for disabled students be provided? Such services as tutoring, counseling, career planning, placement and other services which are available on campus for all students must be accessible for those with disabilities as well. Usually little or no adaptation of existing student services will make them available to disabled students.

What about the student—does he/she really belong in college? The disabled student has the same need as others to try to succeed in college and gain the benefits of being in an age-appropriate setting with accompanying socialization opportunities. A disabled student also has the same right as others to fail and be counseled into an appropriate option.

What about the services of readers, interpreters, notetakers, lab assistants and/or the purchase of such devices as tape recorders, automatic door open-



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ers, or electronic visual magnifiers? These auxiliary aids may be necessary to make a program, course or service accessible to some students with some disabilities. The Advisory Board can be effective in determining the necessary reasonable and non-discriminating policies concerning auxiliary aids.

### Appropriate Accommodations for Academic, Technical and Vocational Programs

Accommodation for disabled students by the institution, may call for the reexamination of policies, practices, and standards so that they do not implicitly exclude a person because of his/her disability. Administrators of all programs need to identify those essential, reasonable, defensible, academic and vocational/technical standards against which all students are measured equally during the application process, course evaluation, and graduation. The resources and Disabled Student Services leaders listed below can be helpful in suggesting guidelines and examples of accommodation.

### Identification of Disabled Students and Development of Support Services

As the college itself becomes more and more accessible, this information should be included in all recruitment materials including brochure and catalogue. The community, and especially rehabilitation counselors and veterans' service personnel, need to be educated about the variety of programs available—including services for disabled people. The wider the recruitment net, the greater will be the number of potential students. Once on campus, disabled students should be encouraged to voluntarily identify themselves after admissions and request and/or discuss for evaluation the support services which will enhance their chance for success. Forms placed in registration packets, available at placement interviews, and discussed during orientation activities will provide such encouragement. In the class room faculty can establish the appropriate avenue for requesting accommodation by announcing at the first class meeting:

> I would appreciate hearing from anyone in this class who has a handicap which may require some special accommodation. I am reasonably sure we can work out whatever arrangement is necessary. See me after class or during my office hours. Contact me this week—not after the first quarterly exam.

The actual services provided for disabled students should, whenever possible, be coordinated with those that exist for all students. There is no advantage to either the institution or the student to duplicate, for example, placement services. Only when no appropriate service exists on campus, should a new one be developed for disabled people. The resources identified below may be helpful to the administrator who coordinates student services.

### Additional Concerns

Advisory boards for handicapped concerns in community colleges frequently need to develop strategies for the following areas:

- Responsibility to such underserved community groups as those who are learning disabled, emotionally disturbed, mentally retarded, and temporarily disabled.
- Methods of effective coordination with Vocational Rehabilitation Services.
- Development of funds for physical access and auxiliary aids.
- Delivery of services within a multi-campus structure.

## The HEATH Resource Center

For additional information about HEATH and its individual projects write or call:

HEATH Resource Center
AAHE/ACE
American Association for Higher Education/
American Council on Education
One Dupont Circle, Suite 780
Washington, DC 20036
(202) 293-6447
(202) 833-4707

- HEATH Resource Center is a clearinghouse and an information exchange on programs, resources, publications, training materials, and skilled personnel serving higher education and handicapped people. The Center publishes a quarterly newsletter, disseminates information upon request, and maintains the HEATH Hotline—(202) 293-6447.

# THE 80'S AND BEYOND: TRENDS AND PROJECTIONS FOR COMMUNITY COLLEGE ACCESS

Victor Margolis
Nassau Community College

I work at Nassau Community College, a locally sponsored open enrollment liberal arts oriented two-year college. We have had many years experience in providing services for the disabled college student. From our particular vantage point, I see major issues that concern our ability to offer the most comprehensive support services for our disabled students.

1. Increasing difficulty in obtaining funds from government sources.

2. Because of the difficulty in obtaining funds, there is increasing competition between the different kinds of services for all student needs.

3. The changing character of the disabled students we serve brings new demands on staff to acquire new skills - the most critical new skills - the most critical new groups include:

   - hearing impaired - who need us to know sign language;
   - learning disabled - who need us to help them adjust to the demands of college and to help the college adjust to them;
   - educationally disadvantaged - who will tax our skills and resources to bring them the help in basic academic skills that they need.

As outgrowths of these three issues I see three questions that all of us in the community college must answer.

1. Where do we find the additional financial resources we need?

2. How do we learn to coexist with other areas of the college to make the best use of our shrinking resources?

3. How do we help our staff to learn to work with the new demands that are being placed on them?

Reproduced from
The Accessible Institution of Higher Education:
Opportunity, Challenge and Response

The Proceedings of the 1981 AHSSPPE Conference
Association on Handicapped Student Service Programs in Postsecondary Education (AHSSPPE)
P.O. Box 886; Ames, Iowa 50010 c 1981

## BARRIERS TO WORKING WITH DISABLED STUDENTS

- Lack of active recruitment of handicapped individuals for existing programs.
- Rigid course starting and completion dates which do not accommodate the needs of handicapped students.
- Registration procedures that make it too difficult for handicapped students to enroll for courses.
- Placement of handicapped students in separate classes instead of integrating them with other students when appropriate - (mainstreaming).
- Emphasis on training for entry level positions which will not financially benefit handicapped persons.
- Problems with social security laws and medical support that may terminate for handicapped once they are employed.
- Lack of work experience programs for handicapped students.
- Equipment and materials not modified for physically handicapped students who require adjustments or equipment and materials outmoded.
- Inaccessible classroom buildings and other campus facilities.
- Programs and courses not based on job market needs.
- Lack of knowledge about programs on the part of handicapped persons and their families.
- Lack of sufficient mobility and transportation to get to college.
- Inadequate career counseling and guidance for handicapped students.
- Lack of interagency communication and cooperation such as with the Department of Rehabilitation and/or Employment Development Department.
- Communication gap between research and development findings and the practices used in the classroom.
- Lack of knowledge and stereotyped attitudes on the part of persons on campus towards the handicapped.
- Lack of knowledge and ability to identify the variety of disabilities that exist on the part of counselors and instructors.
- Insufficient or non-existent job placement and follow-up procedures.
- Absence of positive role models in faculty, counseling, or administrative positions.
- Exclusion of handicapped from the planning and decision making process on courses and services needed.
- Lack of knowledge about rehabilitation and special education on the part of regular instructors.
- Lack of knowledge about funding sources for training handicapped students.

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Source: Miller, S.W. Working with Handicapped Students: An In-Service Training Module for Counselors and Vocational Educators in a Community College Setting. Los Angeles, CA: Los Angeles Community College District, 1980, pp 23-24. (ERIC Document Reproduction Service No. ED 183 236).

This in-service training module was designed to assist community college vocational educators and counselors in carrying out legislation concerning handicapped students. The workbook first presents a list of terms and definitions needed to familiarize educators with the terminology relating to educating handicapped students. In addition to defining "handicapped" and "handicapped student," this section differentiates communicative and physical handicaps and identifies various learning disabilities. Relevant federal and state legislation are then discussed to provide a working knowledge of the community college's legal obligations toward handicapped students. This is followed by an outline of the curricular, administrative, and physical barriers which demonstrates the obstacles to success that handicapped students face at community colleges. The workbook concludes with a discussion of various strategies designed to help educators work successfully with handicapped students. Besides recruitment, placement, and employment strategies, this section discusses needed support services and methods for overcoming stereotypes. Worksheets and exercises are provided.

* * *

Note: The author indicates that the publication Barriers and Bridges (1977) developed by the California Advisory Council on Vocational Education served as a primary source in developing the list of barriers to working with disabled students. Barriers and Bridges reports on the state of the art in the vocational education of disabled students and some of the problems of including the disabled in the mainstream of the vocational education delivery system. Copies of this monograph are available from: California State Department of General Services, Office of Procurement, Publications Section, P.O. Box 1015, North Highlands, California 95660.

# LAW

*The responsibility for implementation of 504 regulations and court decisions rests largely with the institutions of higher education.*

*— Frank J. Lasti, Conference: Higher Education and Disabled Students--Their Right to Equal, Effective, Integrated Education*

# SECTION 504 OF THE REHABILITATION ACT OF 1973 FACT SHEET

U.S. Department of Health, Education and Welfare
Office of the Secretary
Office for Civil Rights
Washington, D.C. 20201

In September 1973, Congress passed a law that prohibits discrimination on the basis of physical or mental handicap in every federally assisted program or activity in the country. That law is Section 504 of the Rehabilitation Act.

Section 504 states that: "No otherwise qualified handicapped individual in the United States . . . shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

In April 1977, a final Section 504 regulation was issued for all recipients of funds from HEW, including elementary and secondary schools, colleges, hospitals, social service agencies, and in some instances, doctors. The Section 504 regulation will effect fundamental changes in many facets of American life, in the actions and attitudes of institutions and individuals toward handicapped persons.

The term handicap includes such diseases or conditions as speech, hearing, visual and orthopedic impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, diabetes, heart disease, mental retardation, emotional illness, and specific learning disabilities such as perceptual handicaps, dyslexia, minimal brain dysfunction and developmental aphasia.

In accordance with a formal opinion of the Attorney General of the United States, alcohol and drug addicts are also considered handicapped individuals. Physical or mental impairments do not constitute a handicap, however, unless they are severe enough to substantially limit one or more of the major life functions.

## PROGRAM ACCESSIBILITY

The regulation provides that programs must be accessible to handicapped persons. It does not require that every building or part of a building must be accessible but the program as a whole must be accessible. Structural changes to make the program accessible must be made only if alternatives; such as reassignment of classes or home visits, are not possible. The intent is to make all benefits or services available to handicapped persons as soon as possible. Institutions are given three years to complete structural changes to their physical plants; nonstructural changes must be made in 60 days.

In meeting the objective of program accessibility, a recipient must take care not to isolate or concentrate handicapped persons in settings away from nonhandicapped program participants.

All buildings for which site clearance has begun after June 3, 1977, must be designed and constructed to be accessible to handicapped persons from the start. The design standards of the American National Standards Institute (ANSI) can be used to determine minimal requirements for accessibility.

## POSTSECONDARY EDUCATION

In colleges and other postsecondary institutions, recruitment, admissions, and the treatment of students must be free of discrimination.

Quotas for admission of handicapped persons are ruled out, as are preadmission inquiries as to whether an applicant is handicapped. However, voluntary postadmission inquiries may be made in advance of enrollment concerning handicapping conditions to enable an institution to provide necessary services.

Higher education institutions must assure accessibility of programs and activities to handicapped students and employees. Architectural barriers must be removed where the program is not made accessible by other means. A university, however, is not expected to make all its classroom buildings accessible in order to comply with program accessibility standards. It may have to undertake some alterations, or it may reschedule classes to accessible buildings, or take other steps to open the program to handicapped students. Handicapped persons should have the same options available to others in selecting courses.

Other obligations of the institutions include:

— Tests which a college or university uses or relies upon, including standardized admissions tests, must not discriminate against handicapped persons. Tests must be selected and administered so that the test results of students with impaired sensory, manual or speaking skills are not distorted unfairly but measure the student's aptitude or achievement level, and not his or her disability.

— Students with impaired sensory, manual or speaking skills must be provided auxiliary aids although this may often be done by informing them of resources provided by the government or charitable organizations.

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Source: The Deaf Student in College, Gallaudet College with the support of the W.K. Kellogg Foundation. Washington, D.C.: Gallaudet College Press, Division of Public Services, 1979; pp.77-9.

— Colleges and universities must also make reasonable modifications in academic requirements, where necessary, to ensure full educational opportunity for handicapped students. Such modifications may include the extension of time for completing degree requirements, adaption of the manner in which specific courses are conducted, and elimination of rules prohibiting handicapped persons from having tape recorders in class or dog guides on campus.

— Physical education must be provided in a nondiscriminatory manner and handicapped students cannot be unnecessarily segregated in physical education classes.

— Infirmary services must be provided handicapped students on a par with those offered others.

### PRESCHOOL, ELEMENTARY AND SECONDARY, AND ADULT EDUCATION

The basic requirements are:

— That no handicapped child can be excluded from a public education because of disability; this requirement is effective immediately.

— That every handicapped child is entitled to a free appropriate education, regardless of the nature or severity of handicap; complete compliance with this requirement must be achieved by September 1, 1978.

— That handicapped students must not be segregated in public schools but must be educated with nonhandicapped students to the maximum extent appropriate to their needs.

— That evaluation procedures be improved in order to avoid the inappropriate education that results from misclassification.

— That procedural safeguards be established so parents and guardians can object to evaluation and placement decisions made with respect to their children.

— That state or local educational agencies locate and identify unserved handicapped children.

An appropriate education can be afforded by many different methods, including use of regular classes with or without aids, depending on need; in private or public homes or institutions, or through combinations of such methods so long as handicapped and nonhandicapped students are educated together to the maximum extent possible. The result should be to provide the education program best suited to the individual needs of handicapped people.

It should be emphasized that where a handicapped student is so disruptive that education of other students in the classroom is impaired, the student can be reassigned. A common sense rule of reason applies in such cases.

The regulation provides that school systems bear special responsibilities, in some instances, for transportation of handicapped people to and from education programs. Where placement in a public or private residential program is necessary, the school district has responsibility for the costs of the program, nonmedical care, room and board, and transportation.

### HEALTH, WELFARE AND SOCIAL SERVICE

The provisions for accessibility and reasonable accommodation that apply to other programs also apply to health, welfare, and social service institutions. Benefits and services may not be denied on the basis of handicap.

Providers of these services may find it necessary to remove barriers, make house calls, or meet handicapped people in offices that are accessible. Institutions with 15 or more employees must also provide auxiliary aids to their clients. Further, health and welfare providers must ensure that persons with impaired sensory or speaking skills are provided effective notice concerning the provision of benefits, waivers of rights and consent to treatment. Hospitals must make special arrangements for handling deaf patients.

Health, welfare and social services for handicapped people must be equal in quality to those in the institution's overall program, and equitable standards of eligibility are required.

### GENERAL EMPLOYMENT PROVISIONS

Employers may not refuse to hire or promote handicapped persons solely because of their disability. Reasonable accommodation may also have to be made to the person's handicap, where needed.

For employees as well as students or patients, accessibility is a primary necessity. Examples of reasonable accommodations might include a cassette recorder for a blind employee, changes in the physical location of the task to be performed, or similar actions. Under certain circumstances, an employer might find it necessary to make more extensive changes. The size and type of employing agency and the cost involved are considerations in determining undue hardship.

Failure to employ or promote an employee who is unqualified or who cannot be helped by reasonable accommodation is not discrimination. However, an employer may not reject an applicant simply because reasonable accommodation is necessary.

Pre-employment physical examinations cannot be required and pre-employment inquiry cannot be made about a person's handicapping condition although employers may ask about an applicant's ability to perform job-related functions. Employers may make an offer of employment conditional on a medical examination as long as the examination is required of all employees and no one is disqualified on the basis of a physical condition that is not job-related.

### ADDICTION

As noted earlier, drug and alcohol addiction are covered under the Section 504 regulation. The regulation, however, protects rights of "qualified" handicapped people and this term implies limitations on what is expected of employers or institutions providing services. In regard to addiction, an employer is not required to change performance or behavioral standards regarding past work performance, or disruptive, abusive or dangerous behavior, even if these actions stem from a person's alcoholism or drug addiction.

Nothing in the regulation prohibits a school from applying its rules concerning use of drugs and alcohol to students with addiction problems just as it would to other students, as long as the rules apply equally to all students. Schools or colleges, like other employers, may apply their standards of employment performance to alcohol and drug problems as they would apply them in any other case.

* * *

QUESTIONS AND ANSWERS PERTAINING TO SECTION 504 OF THE REHABILITATION ACT OF 1973
(Nondiscrimination on the Basis of Handicap) Effective Date June 3, 1977

Q. Who must comply with these regulations?
A. Every recipient of Federal financial assistance.

Q. How is a handicapped person defined?
A. Section 84.3(j) defines a handicapped person as one who, (1) has a physical or mental impairment, (2) has a record of such impairment, or (3) is regarded as having such an impairment. The terms used in this definition are further defined in the regulations.

Q. Would persons disadvantaged by environment, culture or economics be classified as handicapped?
A. No. The definition only includes physical or mental impairments. Individuals not covered under the regulations include those who have prison records, or who are homosexual, and other non-physical or non-mental handicaps. Of course, if a homosexual also had a physical or mental impairment, then he/she would be covered under the regulations.

Q. Are drug addicts and alcoholics considered as handicapped persons?
A. Yes.

Q. Since drug addicts and alcoholics are handicapped persons, may disciplinary action be taken against them if they violate rules pertaining to the use or possession of drugs and alcohol?
A. Neither rules prohibiting the use or possession of drugs and alcohol nor their application to drug addicts or alcoholics is prohibited by the regulations, provided the rules are enforced evenly with respect to all students.

Q. Do the regulations require institutions to take any specific actions?
A. Yes. First each school or college must conduct a self-evaluation similar to that conducted under Title IX except that reasonable efforts must be made to include handicapped persons in the group making the self-evaluation. Second each school or college must designate an individual to coordinate efforts to overcome discrimination on the basis of handicap and adopt a grievance procedure to hear alleged complaints. Third every school or college which is a recipient must take "appropriate initial and continuing" steps to notify participants and other interested parties that it does not discriminate.

Q. How can handicapped persons be employed to perform normal tasks?
A. The regulations require that schools and colleges make "reasonable accommodations" to the known physical or mental limitations of handicapped applicants or employees unless the recipient can demonstrate that the accommodations would impose an undue hardship on the operation of its program.

Q. What does "reasonable accommodations" mean?
A. Making facilities used by employees readily accessible to and usable by handicapped persons and job restructuring, part-time or modified work schedules, acquisition or modification of equipment or devices, the provision of readers or interpreters, and similar actions.

Q. Must all programs of an institution be accessible to handicapped students?
A. Yes, "when viewed in its entirety" all programs operated by a recipient must be accessible to handicapped persons.

Q. What does it mean to say "when viewed in its entirety"?
A. Because many existing facilities are not now accessible to handicapped persons, classes and services may be rescheduled or moved to accessible buildings. However, priority must be given to providing programs and services in the most integrated setting. The emphasis of the regulations throughout is to "mainstream" handicapped persons.

Q. What about the accessibility of new buildings?
A. All buildings which are constructed after the effective date of these regulations must be readily accessible to handicapped persons. Standards for making buildings accessible can be obtained from the American National Standards Institute, Inc., and all new construction must conform to these guidelines.

Q. What about alterations to existing facilities?
A. Alterations that affect the usability of the facility shall to the maximum extent feasible, be altered so that the altered portion is readily accessible and usable by handicapped persons.

Q. Are there also separate sections pertaining to higher education?
A. Yes. Subpart E applies specifically to postsecondary education and covers Admissions and Recruiting, Treatment of Students, Academic Adjustments, Housing, Financial Aid and Employment Assistance, and Non-academic Services. These sections read much like Title IX regulations.

Q. What sorts of academic adjustments do the regulations require?
A. The regulations do not intend any weakening of academic standards but would require, for instance, that a blind student be able to substitute a music appreciation course for an art appreciation course or vice versa for a deaf student.

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Source: These questions and answers have been selected from a special report issued as a supplement to the April, 1977 issue of The School Student and The Courts and the June, 1977 issue of The College Student and The Courts, published by College Administration Publications, Inc., P.O. Box 8492, Asheville, NC 28804.

## ASSESSMENT EXERCISE FOR FEDERAL LEGISLATION

A. Section 503 and/or 504 of the Rehabilitation Act of 1973

B. The Vocational Education Amendments (VEA) of 1976 PL 94-482 (also known as Title II 98-40-78 Amendments)

C. Office for Civil Rights (OCR) - "Gidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap in Vocational Education Programs"

DIRECTIONS: Using the choices listed above, indicate which legislation mandates each of the following:

1. _____ Requires a self evaluation survey or compliance review of each campus
2. _____ Provides money for handicapped students in vocational education programs
3. _____ Requires employers to take affirmative steps to hire handicapped employees
4. _____ Requires an individualized educational plan for each student
5. _____ States that an employer's request for a nonhandicapped worker cannot be honored
6. _____ Requires the State to provide technical assistance to identify and remedy discriminatory practices
7. _____ Notification of non-discrimination policies is required
8. _____ May pay up to 50% of the excess costs for vocational programs for handicapped students
9. _____ Stipulates that an employee must be designated to coordinate activities for handicapped students
10. _____ Requires the State to conduct periodic compliance reviews of L.E.A.'s to insure non-discrimination
11. _____ Threatens withdrawal of Federal funds for non-compliance
12. _____ Requires the use of an advisory committee

* * *

Answers: (1) 503 and/or 504 and/or OCR Guidelines; (2) VEA 1976; (3) 503; (4) 504; (5) OCR Guidelines and/or 503; (6) OCR Guidelines; (7) 503 and 504 and OCR Guidelines; (8) VEA 1976; (9) 504; (10) OCR Guidelines; (11) 503 and 504; (12) VEA 1976.

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Source: Miller, S.W. Working with Handicapped Students: An In-Service Training Module for Counselors and Vocational Educators in a Community College Setting. California, Los Angeles Community College District, 1980, pp. 20-21. Available from: ERIC (ED 183 236).

A sequence of four objectives is the basis of this in-service training module designed to assist community college vocational educators and counselors in carrying out legislation concerning handicapped students. The workbook first presents a list of terms and definitions needed to familiarize educators with the terminology relating to educating handicapped students. In addition to defining "handicapped" and "handicapped student," this section differentiates communicative and physical handicaps and identifies various learning disabilities. Relevant federal and state legislation are then discussed to provide a working knowledge of the community college's legal obligations toward handicapped students. This is followed by an outline of the curricular, adiministrative, and physical barriers which demonstrates the obstacles to success that handicapped students face at community colleges. The workbook concludes with a discussion of various strategies designed to help educators work successfully with handicapped students. Besides recruitment, placement, and employment strategies, this section discusses needed support services and methods for overcoming stereotypes. Worksheets and exercises are provided.

## NATIONAL ORGANIZATIONS DEALING WITH LEGAL RIGHTS OF DISABLED PEOPLE

American Coalition of
Citizens with Disabilities
1346 Connecticut Ave., N.W.
Washington, DC 20036
(202) 331-2240

Architectural and Transportation
Barriers Compliance Board
330 C Street, S.W., Room 1010
Washington, D.C. 20201

Children's Denfense Fund
1520 New Hanpshire Ave., N.W.
Washington, D.C. 20036

Clearinghouse on the Handicapped
Office of Handicapped Individuals
Dept. of Health, Education, and
Welfare
Room 338D, Hubert Humphrey Bldg.
Washington, D.C. 20201
(202) 245-1961

Council for Exceptional Children
1920 Association Drive
Reston, VA 22901
(703) 620-3660

Developmental Disabilities Law
Project
500 W. Baltimore Street
Baltimore, MD 21201
(301) 528-6307

Disability Law Resource Center at
the Center for Independent Living
2539 Telegraph Avenue
Berkeley, CA 94704
(415) 841-3790

Disability Rights Center
1346 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 223-3304

Education Law Center, Inc.
605 Broad Street
Suite 800
Newark, NJ 07102

Law Center
1315 Walnut Street, 17th Floor
Philadelphia, PA 19107
(215) 735-7200

Mental Disability Legal Resource
Center
American Bar Association
Commission on the Mentally
Disabled
1800 M Street, N.W.
Washington, D.C. 20036
(202) 331-2240

Mental Health Law Project
1220 19th Street, #300
Washington, D.C. 20036
(202) 467-5730

National Center for Law and the
Deaf/Legal Defense Fund
7th & Florida Avenues, N.E.
Washington, D.C. 20002
(202) 447-0445
(202) 547-0540

National Center for Law and
the Handicapped
1235 North Eddy Street
South Bend, IN 46617
(219) 288-4751

Office for Civil Rights
U.S. Dept. of Health, Education &
Welfare
330 Independence Avenue, S.W.
Washington, D.C. 20201
(202) 245-6700
(202) 472-2916 (TTY)

Office of Federal Contract
Compliance Programs
Veterans and Handicapped Branch
Dept. of Labor
Washington, D.C. 20210
(202) 523-9384

U.S. Dept. of Justice
Office of Special Litigation
Civil Rights Division
10th & Pennsylvania Avenue, N.W.
Washington, D.C. 20530
(202) 739-5303

Western Law Center for the
Handicapped
849 South Broadway, Room 206
Los Angeles, CA 90014
(213) 972-0061

Source: Cornelius, D.A., Strully, J., and Mistler, S. Overdue Process: Providing Legal Services to Disabled Clients. Washington, D.C.: Regional Rehabilitation Research Institute on Attitudinal, Legal, and Leisure Barriers, 1979; pp.19-20.
Available from: George Washington University, RRI-ALLB, Suite 704, 1828 L SUreet, N.W., Washington, D.C. 20036
Phone: 202/676-6377.

# IDENTIFICATION

*At the present time, there are approximately 2.5 million disabled people in this state, and every year thousands of New York residents become either temporarily disabled or permanently disabled.*

*— Karen Burstein, Executive Director of the New York State Consumer Protection Board*

# IDENTIFICATION OF DISABLED STUDENTS

*"The methods used on postsecondary campuses to identify disabled students are at best inadequate. Most colleges use a 'catch-as-catch can' approach with the result that many disabled students remain unidentified and consequently unaware of accommodations and services available to them. This scenario warrants the need for colleges to explore improved methods of implementing simple, confidential processes for student self-identification at both institutional (for purposes of collecting data, developing policies, and planning programs) and instructional (for purposes of determining needs and providing accommodations) levels."*

## DEFINITIONS OF DISABILITIES

Section 504 of the Rehabilitation Act of 1973 defines a "handicapped person" as any person who (1) has a physical or mental impairment which substantially limits one or more major life activities; (2) has a record of such an impairment; or (3) is regarded as having such an impairment.

For the purposes of this project, a disabled student is any student who cannot succeed in a regular vocational education program without special accommodations. The specific types of disabilities used in the project are defined below. The definitions are based upon the federal definitions of disabilities from the Education for All Handicapped Children Act of 1975 (P.L. 94-142).

Emotionally Disabled - a person exhibiting one or more of the following characteristics over a long period of time and to a marked degree: an inability to learn which cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems.

Hearing Disabled - a person whose receptive and expressive communication skills are so limited by hearing loss that participation in a regular classroom situation requires special accommodations.

Learning Disabled - a person with a disorder in one or more of the basic psychological processes needed to receive, organize, or express information including the ability to understand or use spoken or written language.

Mobility Disabled - a person with a severe orthopedic, neurological, or motor impairment. Examples include spina bifida, arthritis, paraplegia, hand function impairment, muscular dystrophy, spastic paralysis, etc.

Speech Disabled - a person displaying a disorder in verbal communication such as stuttering, impaired articulation, unintelligible speech, or other vocal deviations.

Visually Disabled - a person whose partial or complete loss of vision precludes normal educational functioning without special accommodations.

Other Disabled - a person with limited strength, vitality, or alertness due to chronic or acute health problems. Examples include heart disorders, hemophilia, epilepsy, diabetes, severe allergies, etc.

Multiple Disabled - a person having more than one of the primary disabilities defined above.

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Source: Corrado, T., & Colfer, M.E. Disabled Student Project: Beyond Access--Meeting the Instructional Needs of Handicapped Students in Postsecondary Occupational Education. Albany, New York: Two-Year College Development Center, SUNY at Albany, 1981, p.33.
Available from: Two-Year College Development Center, SUNY at Albany, 135 Western Avenue, Draper 306, Albany, NY 12222.

## CATEGORIES AND LABELING

Maynard Reynolds, a respected leader in the field of special education, has pointed out that the labels visually handicapped, mentally retarded, hearing impaired, emotionally disturbed, and socially maladjusted all are negatively loaded. Nevertheless, there is little choice but to use them. Not only are these and other categories used for demographic and administrative purposes, but they constitute "first cuts" to discussing subsets of persons whose disabilities tend to reflect similar problems, problems that can interact with the demands of different types of jobs.

Although categories and labels are not very informative about individual capabilities, they do offer some prospect for understanding functional problems of some groups of handicapped persons...

**Exhibit 1-1 A Comparison of Primary and Secondary Problem Areas of Life Performance for Various Categories of the Handicapped**

| Life performance problem areas | Visually, hearing, and speech handicapped | Physically, health, and neurologically handicapped | Mentally, specific learning, and emotionally handicapped |
|---|---|---|---|
| Communication | primary | secondary | secondary |
| Motor/movement | secondary | primary | secondary |
| Social/behavioral | primary | primary | primary |
| Learning/comprehension | secondary | secondary | primary |

Exhibit 1-1 displays a simple function-by-handicap method of identifying primary and secondary problem areas. Classifications on the left margin represent major aspects of life performance. Classifications along the upper margin are commonly used categories (types) of handicaps. For convenience of discussion, the handicaps are grouped into three sets. Groupings are not made on the basis of similarity of dysfunction (they certainly are different in that regard), but rather on the basis of similarity in terms of their general effects on life functioning, particularly on vocational pursuits.

A given job, for example, may require facility in communication (listening and/or speaking, either in person or through use of a message-carrying device). It also may require motor skills and movement, such as carrying, grasping, or traveling. It may require social interaction and certain standards of personal behavior. It nearly always will require some form of learning and comprehension.

* * *

Source: Weisgerber, R.A., Dahl, P.R., and Appleby, J.A. Training the Handicapped for Productive Employment. Rockville, Maryland: Aspen Publication, 1980, pp. 9-10.
Available from: Aspen Systems Corporation, 1600 Research Blvd., Rockville, MD 20850.

# Office for the Disabled

Hudson Valley Community College

Vandenburgh Avenue • Troy, New York 12180
518/283-1100 EXT. 325 or 746

DEAR STUDENT:

CONGRATULATIONS ON YOUR ACCEPTANCE TO HUDSON VALLEY COMMUNITY COLLEGE. STUDENTS WHO HAVE TEMPORARY OR PERMANENT DISABILITIES ARE ELIGIBLE TO RECEIVE SERVICES THROUGH THE OFFICE OF THE DISABLED LOCATED IN THE CAMPUS CENTER EDUCATIONAL OPPORTUNITY PROGRAM OFFICE. IF YOU WOULD LIKE MORE INFORMATION, PLEASE COMPLETE AND RETURN THIS FORM. ALL INFORMATION WILL REMAIN CONFIDENTIAL.

I WOULD LIKE TO KNOW MORE ABOUT (PLEASE CHECK):

____ HOUSING

____ ACCESSIBLE PARKING

____ COUNSELING &/OR CAREER PLANNING

____ READERS, NOTETAKERS, LAB ASSISTANTS

____ OTHER (PLEASE SPECIFY) _____

____ ESCORT SERVICE

____ SPECIAL SCHEDULING

____ SPECIAL LIBRARY SERVICES

____ WORKING AS A READER, ETC.

NAME _____ DATE OF BIRTH _____

ADDRESS _____ TELEPHONE _____

CITY _____ STATE _____ ZIP CODE____

SOCIAL SECURITY NUMBER _____

DISABILITY (VOLUNTARY) _____

INTENDED MAJOR FIELD OF STUDY _____

CLASS YEAR: FRESHMAN _____ TRANSFER _____

PLEASE RETURN AS SOON AS POSSIBLE TO:

PABLO E. NEGRON, JR.
COORDINATOR FOR DISABLED STUDENTS
CAMPUS CENTER (EOP OFFICE)
80 VANDENBURGH AVENUE
TROY, NEW YORK 12180
PHONE (518) 283-1100 EXT. 325 OR 746

QUEENSBOROUGH COMMUNITY COLLEGE
The City University of New York
Bayside, New York 11364

HEALTH BACKGROUND QUESTIONNAIRE

PLEASE PRINT

Confidential

Last Name First Name Middle Initial

Home Address

Date of Birth Social Security No. Curriculum

1. Have you ever attended a sight conservation course in public school? Yes _____ No _____
   a) Are you legally blind? _____ _____
   b) Are you visually impaired? _____ _____
   c) Are you nearsighted? _____ _____
   d) Do you use a cane? _____ _____

2. Did you ever attend a health conservation class in public school? Yes _____ No _____
   If yes, please clarify: _____

3. Do you have any physical limitations, i.e. vision, hearing coordination, balance, etc.? Yes _____ No _____
   If yes, please clarify: _____

4. Do you use any orthopedic or prosthetic devices, i.e. crutches, wheelchair, hearing aid, low vision lenses, etc.? Yes _____ No _____
   If yes, please clarify: _____

5. Do you have any speech impediments? Yes _____ No _____
   If yes, please clarify: _____

6. Are you diabetic? Yes _____ No _____

7. Do you tend toward having either high or low blood pressure? Yes _____ No _____
   If yes, please clarify: _____

8. Do you have any neurological problems? Yes _____ No _____
   If yes, please clarify: _____

9. Have you ever been hospitalized for any reason? Yes _____ No _____
   If yes, please clarify: _____

10. Are you currently known to New York State Division of Vocational Rehabilitation Counseling (DVR)? Yes _____ No _____
    If yes, please indicate your counselor's name and the office at which he is located: _____

11. Are you currently known to the Office of Rehabilitation Counseling Services for the Blind (RCS)? Yes _____ No _____
    If yes, please indicate your counselor's name and the office at which he is located: _____

12. Is there any special equipment or considerations you might need in order to avail yourself more fully of our educational and social facilities and services? _____

COMMENTS:

## STUDENT DATA SHEET*

NAME:_____ DATE:_____
LOCAL ADDRESS:_____ SS OR STUDENT #_____
PERMANENT ADDRESS:_____ LOCAL TEL. #:_____
AGE:_____ DATE OF BIRTH_____ PERM. TEL. #:_____

### MEDICAL INFORMATION

DISABILITY:_____ ONSET:_____
CAUSE:_____
FUNCTIONAL LIMITATIONS:_____
_____
HOSPITAL AFFILIATION:_____
DOCTOR:_____ TEL. #_____
MEDICATIONS:_____
MEDICAID:_____ MEDICARE:_____ OTHER:_____

### EDUCATIONAL/VOCATIONAL INFORMATION

DATE ENROLLED AT SUNYA:_____
FIELD OF STUDY (DEPT. MAJOR):_____
ACADEMIC ADVISOR:_____ TEL. #:_____
STATUS (FT, PT):_____
DEGREE SOUGHT:_____ EXPECTED DATE OF COMPLETION:_____
ACADEMIC MODIFICATIONS OR AIDS:_____
_____
VOCATIONAL GOALS:_____
VOCATIONAL HISTORY:_____
JOBS HELD:_____
SPONSORED BY: OVR_____ CVH_____ OTHER_____
COUNSELOR:_____
ADDRESS:_____ TEL. #:_____

### SOCIAL INFORMATION

SINGLE_____ MARRIED:_____ CHILDREN:_____
HOUSING LIFE STYLE:_____
FAMILY INVOLVEMENT (IF ANY):_____
_____
INCOME:_____
PUBLIC ASSISTANCE:_____

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*This form is used by the Disabled Student Services Office at the SUNY at Albany campus to identify disabled students and to obtain background information.

# ATTITUDES

*The terms 'disabled' and 'handicapped' are in effect labels which stereotype and categorise a diverse group of people who have nothing intrinsic in common.*

*— Glorya Hale, The Source Book for the Disabled*

# DISABLED OR HANDICAPPED?

The words we use reflect our attitudes; the use of the terms "the disabled" and "the handicapped" is particularly revealing. To many people they are objectionable. These terms are in effect labels which stereotype and categorize a diverse group of people who have nothing intrinsic in common. They are not descriptions of actual conditions and are really applicable only in such generalizations as in the title of a book or an act of legislation intended for people with all kinds of physical disabilities in all kinds of life situations.

Throughout this book we have tried, as far as possible, to avoid using these terms and have instead used the expressions "people with disabilities," "people who are disabled," "people with physical limitations." On occasion, too, to avoid awkwardness and repetition, we have referred to "disabled" or "handicapped people," although in fact few people are totally disabled or completely handicapped, as these terms might imply.

Then there are the words "disabled" and "handicapped" themselves, which are used interchangeably, as if they mean the same thing and, by usage, have come to mean the same thing. But a physical disability, no matter how or by what it was caused, is a medically determined fact that can be defined and described explicitly. The word "handicap," originally used to denote a disadvantage in sports, is in effect a concept that's open to change as well as to interpretation.

Sometimes a handicap can be minimized or even completely eliminated. A man whose legs are paralyzed and depends totally on a wheelchair, is very handicapped if he lives and works in inaccessible buildings and cannot use public transportation. If, however, he moves to a ranch-style house, gets a job in a building which has an elevator and buys a car with hand controls, he is no longer handicapped since his disability no longer affects his ability to function. There are, too, disabilities which will seriously handicap a person in one situation and not in others. A concert pianist who loses two fingers is severely handicapped as far as her career is concerned, although she may not be particularly handicapped in most of the other areas of her life.

In educational, occupational and recreational competition with people who are able-bodied, people with physical disabilities are often in the same position as the competitor in a sport who has been given a handicapping disadvantage that makes winning more difficult. There are two ways in which a person with a disability can mitigate his or her handicap. The first is through the use of suitable aids; the other is through constructive and realistic attitudes.

Aids, sophisticated or simple, can often make daily life infinitely easier. Aids save time and conserve energy, increase mobility and extend the ability to communicate. The space age has boosted the relatively new field of biomedical engineering, applying the knowledge gained in space technology to problems of disability. Included in the many new inventions are a heart pacemaker with a rechargeable battery that needs no surgical replacement, and a wheelchair that moves in response to a voice-activated mini-computer. With the increased momentum of applied research, aids that seemed possible only in science fiction may soon be a reality.

Many devices which are readily available are standard, inexpensive and easy to use; others are tailor-made for the individual and require professional counsel. Some people who are disabled discover ingenious ways to solve practical problems and to create their own aids. It takes imagination, knowledge and positive assistance from others to get the best out of the resources that are at hand, but the effort is worthwhile.

The extent to which you are handicapped by your disability can also depend on your attitudes. Surveys have shown that many people with severe physical limitations don't consider themselves to be particularly handicapped, while others, whose disabilities are relatively minor, think of themselves as severely handicapped. And such attitudes affect every area of the individual's life. Sometimes a person's view of his or her disability is more handicapping than the disability itself.

There are a number of common handicapping attitudes. Some people, for example, can't disassociate themselves from the able-bodied concept of "wholeness." They feel that they have to make up for being disabled and drive themselves relentlessly, often attempting to do far more than their capacities permit. Then, when they can't accomplish what is probably impossible, they feel frustrated, angry and, frequently, bitter. In their efforts to prove that they are as good as, or even better than, their able-bodied peers, they cannot accept their limitations and therefore do not take pleasure from their actual abilities and achievements.

Other people over-identify with the able-bodied world and try to "pass" as able-bodied. If their impairments are slight or hidden, they do without the aids and the help they really need and expend far too much energy keeping up their pretense. Although there is nothing wrong in playing down a disability, to deny it is to deny an aspect of oneself.

Some people with disabilities avoid others with similar problems. Although their excuse – that they have nothing in common – may have some truth in it, they are more strongly motivated by a fear of being identified as "one of them." This is a refusal to face oneself realistically. It is an attitude which often stops people from meeting many interesting men and women from all walks of life whose experiences of disability and whose common aims could be helpful and stimulating.

The opposite reaction is equally handicapping. While institutional living, special schools and architectural barriers all conspire to segregate people with disabilities, some people remain apart by choice. They cling to other people who are disabled for mutual support, creating a ghetto that's often barred to people who are able-bodied, as well as to those suffering from disabilities of a different kind.

Identifying the attitudes that can handicap – and understanding them – helps to change or control them so that a disability can be prevented from becoming a handicap.

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Source: Hale, G. (Ed.). The Sourcebook for the Disabled. New York: Bantam Books, 1981, pp.124-5.
Available from: Bantam Books, Inc., 666 5th Avenue, New York, NY 10103 (paperback).

# What makes disabled people disabled?

## Attitudes & Barriers

A person with a disability is -- first and foremost -- a person. While a particular disability may limit certain types of activities or abilities, it does not make the individual any less a person. Ten to 15 percent of the population has a disability such as blindness, deafness, paralysis, cerebral palsy, neurological disorder, mental illness, arthritis or mental retardation.

An attitude is a feeling or emotion which a person has towards a fact, situation or person. Awareness is the knowledge or perception about a situation, object or person. Attitudinal barriers are a way of thinking or feeling that blocks or limits people's perceptions of the potential of disabled people to be capable, independent individuals. Attitudinal barriers include prejudice, ignorance, fear, insensitivity, bigotry, stereotyping, misconception, discrimination, dislike, insecurity, discomfort, tension, and intolerance.

Positive attitudes and awareness help non-disabled people in their contacts and relationships with people who have disabilities. Attitudes which are insensitive and prejudicial produce poor relationships. A person may not be aware of biases or negative attitudes and may express them in words or actions.

## No-No Words

Just as some well-known, four-letter words are offensive, so are some words used in referring to people with disabilities. Here are some to avoid when speaking to or about people with disabilities.

Afflicted -- It is negative and suggests hopelessness.
Case -- Sounds like something to be filed away and institutionalized.
Cerebral palsied -- Sounds like an inanimate object instead of a person. The correct description is "person with cerebral palsy."
Confined to a wheelchair -- A person uses a wheelchair.
Courageous -- Disabled people are not unusually brave and do not want to be regarded as superheroes. Like everyone else, they have the will to live and enjoy life's pleasures.
Crippled -- This paints a mental picture of a person who can't do anything, someone whom people would rather ignore.
Deaf and dumb or deaf mute -- These out-of-date terms were used to describe a deaf person who also could not speak. Many deaf or hearing-impaired individuals can speak, although their speech may be hard to understand. Deafness does not make a person dumb or ignorant.
Disease -- Describes a contagious condition. Most disabled person are as healthy as anyone else.
Epileptic -- Individuals with this condition prefer to be referrred to as persons who have epilepsy.
Gimp -- This out-of-date word was once used to describe someone who walked with a limp. It's a putdown.
Normal -- Refers to numbers, not people. When used to describe a non-disabled person, it suggests that a disabled person is abnormal or subnormal.
Patient -- Hospitals and doctors have patients. Most disabled people are not in hospitals or regularly cared for by doctors. Rather, they are self-reliant members of the community.
Poor -- Describes a person who lacks money or one to be pitied.
Retard, retardate or retarded -- Because some disabled people are at times considered awkward, this does not mean that they are retarded. Individuals who are mentally retarded prefer to be called by their own names.
Spastic -- Some disabled people lack coordination but this is only a product of the physical disability and should not be ridiculed.
Suffering -- To say that someone suffers from a disability means that he or she is in constant pain as a result of the disability. This is rarely the case.
Unfortunate -- This implies unlucky, unsuccessful or social outcast. Whether or not luck had anything to do with a person becoming disabled, he or she wants to be regarded as a real, likeable person.
Victim -- Victims are people sacrificed by an uncontrollable force or agent. Disabled people do not want to be considered as helpless victims but as people -- with many worthwhile attributes.

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Source: What Makes Disabled People Disabled? (brochure). Albany, New York: New York State Office of Advocate for the Disabled.
Available from: N.Y. State Office of Advocate for the Disabled, Empire State Plaza, Agency Bldg.1, 10th Floor, Albany, NY 12223 (518/473-4129).

## ATTITUDES AND SUCCESS

### What Attitudes Foster Success of Handicapped Students?

This question concerns attitudes of the handicapped themselves as well as of parents, teachers, and other important persons in a handicapped individual's life. It seems to be most helpful to describe attitudes as processes, with examples, rather than as states of mind. The many positive attitudes that have been associated with successful achievement by handicapped students may be capsulized in three processes:

High Expectation. High expectation refers here to a goal based upon what the handicapped individual potentially can do. This does not mean to ignore the handicap because that could prove both dangerous and cruel. To treat a blind student no differently from a sighted student could pave the way to injury or isolation. High expectation does mean having a long-range goal such as living in an apartment, holding a job, living a productive independent life, learning valuable skills, and making a contribution to society. There may be substantial barriers to be overcome before achieving any of these goals but the vision of the goal is never forgotten.

Abundant Praise for Progress. Giving students praise for progress is an essential skill that every teacher learns to perfection. The only difference in applying that skill with handicapped students is that smaller achievement steps may warrant acknowledgement and praise because of the considerable effort required.

Relaxed Humor. Humor is spontaneous, that is its nature. Sometimes funny things happen that involve a person's handicap. Being relaxed enough to allow yourself to laugh spontaneously is usually experienced as a tremendous relief by the handicapped person. It also relieves the tension felt by the nonhandicapped individuals involved in a situation that could be awkward or embarrassing for a handicapped person.

### What Attitudes Inhibit Success of Handicapped Students?

Attitudes of handicapped students that can create problems for themselves in mainstream vocational education include:

- Anxiety about entering a new situation
- Low self-esteem
- Lack of self-confidence
- Lack of assertion

These attitudes could represent nonhandicapped as well as disabled students; and, the solutions that teachers have found that work for able-bodied students will work as well for the handicapped. Handicapped students generally are more keenly aware of their limitations than are other adolescents; therefore, they may be cautions, reserved, and just plain careful. Nevertheless, they have the same concerns that nonhandicapped students have when entering a new class, meeting new people, and not knowing what will be expected of them. Their greatest problems will be:

- Breaking the ice
- Dealing with awkward, stiff, or uncomfortable responses of others
- Dealing with alienation
- Dealing with situations that make them appear ignorant, clumsy, or inept

Some pointers about getting to know handicapped individuals may go a long way toward minimizing potential negative attitudes of a disabled student:

- Relax
- Attend to the person, not to the handicap
- Be your natural self
- Offer help when requested
- Offer help that is natural without being overprotective
- Avoid prejudging an individual as either courageous or helpless

The solution to avoiding embarrassment and alienation is not in avoiding failure. It is unrealistic to expect students to venture into new skill areas and not fail from time to time in their early attempts. They are expected to be awkward at first but to improve with practice. It is important for handicapped students, as for any students, to learn how to handle failure. One simple, but very effective, approach for vocational educators is to monitor what students say to themselves. Words can significantly influence attitudes and behavior, especially words and phrases that students say over and over to themselves. The following are some examples of helpful and harmful phrases:

| *Harmful* | *Helpful* |
|---|---|
| I can't do that. | I can't do that *perfectly yet.* |
| I can't do anything right. | I didn't do *this thing* right. |
| I did it all wrong again. | I did it wrong again. I'd better figure out what I need to *do differently* to do it better. |
| I don't want to try that, I'd just make dumb mistakes. | It will be hard, and I will make mistakes *at first.* I can do what I have to do if I keep trying. |

The old saying "as a man thinketh, so is he" is particularly true of handicapped students. When a student says negative things out loud to himself, the teacher can say that such statements simply won't be tolerated in that class and then give the student an acceptable statement to replace the damaging one. Acceptable statements are accurate, specific to the situation at hand, and realistically optimistic. The teacher can also set the stage for failure experience by saying that students are not expected to do something perfectly or even well the first time but that they are expected to try and they are expected to improve.

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Source: Dahl, P.R., Appleby, J.A., and Lipe, D. Mainstreaming Guidebook for Vocational Educators: Teaching the Handicapped. Salt Lake City, Utah: Olympus Publishing Co., 1978.

# CHANGING ATTITUDES

Harold E. Yuker and J. Richard Block
Hofstra University

## THE EFFECTS OF EDUCATION AND INFORMATION

Information has a limited effect on changing attitudes! We usually think that information will be an important factor in changing attitudes. Very often this does not happen. For example, just before this meeting I was interviewed by Canadian Broadcasting Company (CBC). They told me they would tape for about five or six minutes, but that I might get a minute or a minute and a half on the 6:00 News. Both the CBC people and I agreed it would not make much differnece one way of the other in changing attitudes. You only change attitudes with much more information than that and then only by using very specific techniques. Let me give you a few general principles.

First, any message designed to change attitudes should provide *new* information which tells people something they didn't know before. If it is something they know, they simply won't pay attention. If it tells them something they don't know, they are somewhat more apt to pay attention.

Second, the message you give should state definite conclusions. Very often in education today people say we should let the students draw their own conclusions. This is not a good educational technique in terms of the evidence. It sounds fine pedagogically, and it may work well in some classes, but if you are trying to propagandize, the best thing is to state your conclusions. You should not simply lay out the facts.

There is a third factor, and that is "one-to-one" communication. This is one of the most effective techniques. If I stand here lecturing to you as a group, I *may* have some effect. I could have more effect if I could talk to each of you for ten minutes than I can for one hour of lecturing. Of course it would take a lot more effort from me, but I would be more effective.

Let us turn next to the effects of interaction with disabled persons. This is a complex issue and several factors are important. Research shows that people who help the disabled (on the average) do not have particularly positive attitudes towards them. In part, if you are in a position where you view yourself as "helping," the person you help is usually perceived to have a lower status than you do. Of course, I am generalizing, but many physicians and other professionals (and volunteers as well), who work in rehabilitation, do not have positive attitudes towards their patients. You are most likely to have a positive attitude if the person is a colleague; if the person is able to do what you are able to do. The same is true for those who have household workers who are Black. There is close physical proximity, but the relative status is very different. Attitudes towards blacks are likely to become more positive when they have equal or higher status than whites.

Second, the type of interaction that occurs is very important. If people engage in cooperative behavior it leads to increased positiveness in attitudes; if they engage in competitive behavior it does not. For example, I do not approve of wheelchair basketball and wheelchair olympics, particularly when wheelchair disabled persons compete with wheelchair nondisabled. If nondisabled people in wheelchairs get beaten by the disabled in wheelchairs, the fact that they were competing and lost won't make them feel any more positively toward the disabled, even though the nondisabled in that situation may have a higher status. You get to like people more when you cooperate with them than when you compete.

Third, the level of intimacy in the contact makes a big difference. The closer the contact, the more people are likely to help one another and, therefore, develop positive attitudes. Casual contact will have relatively little effect. Fourth, frequency of contact makes a great deal of difference; the more frequent the contact, the more likely it will be positive. Fifth, societal and institutional support is very important but usually ignored. In the U.S., disabled people recently were able to get Secretary of Health, Education and Welfare Califano to sign into law something that should have been signed over a year previously. They had to exercise "clout" to get it done. Once it is law, however, it indicates that society supports the disabled; that you must not discriminate against them. This should make a great deal of difference. Some individuals may not like it, but if you treat the handicapped equally, if they have an opportunity for equal status, you get contact and you get it at an appropriate level. You are, therefore, likely, in addition, to get positive changes in attitudes...

## SPECIFIC TECHNIQUES FOR CHANGING ATTITUDES

We want to spend a few minutes now discussing some specific techniques for changing attitudes. There are four which seem to work. They are not often used and some of them are a bit artificial, but they are effective. They're considered *active* techniques for changing attitudes. In order to change attitudes you typically have to get people to do something. You seldom change attitudes by lectures or written material. They may have a long-range effect, but the only real way of changing attitudes is by getting people to actively participate. The four techniques which I will review with you are attitudinal self examination, role-playing, public commitment, and counter-attitudinal advocacy.

Let us start with *attitudinal self-examination.* An effective change technique is to induce a person to think about his or her attitudes towards the disabled. If you review your responses to each of the questions on the ATDP Scale that we gave you at the beginning of this meeting, it would be a step in that direction. The technique involves getting a person to examine his or her thoughts. Does the person think disabled children should go to separate schools and, if so, why? Does he/she think the disabled should mingle with normal people? Why, or why not? Ask individuals

Source: Yuker, H.E. and Block, J.R. Challenging Barriers to Change: Attitudes Towards the Disabled. Albertson, New York: National Center On Employment of the Handicapped at Human Resources Center, 1979, pp.51-58.
Available from: National Center on Employment of the Handicapped, Human Resources Center, Albertson, NY 11507.

to look at how they really feel, what are their beliefs, and what are their attitudes. Should the disabled congregate primarily with nondisabled people? Should disabled and nondisabled marry? Should disabled people marry one another? The self-examination should be as deep as possible; possibly with discussion and even argument. But those who actively participate are likely to have a change in attitudes while no change is likely to be observed in those who are passive.

A second very effective technique is *role-playing*. By role-playing we mean puting the nondisabled person into a situation a disabled person regularly experiences. This might involve putting them in a wheelchair or blindfolding them so that they have some appreciation of the physical problems encountered by certain disability groups. Their intellectual capacities will remain, but their physical abilities will be limited. In certain ways, they won't have the opportunity to experience the negative attitudes of nondisabled people towards themselves and it will not affect their ability to find employment, etc. But they may develop an appreciation of some of the difficulties, and how even removing the modest physical barriers can help disabled people. The longer this role-playing activity goes on the better. Putting someone in a wheelchair for an hour may be interesting, but it is much more realistic if they could spend one or even two days from morning to night experiencing problems faced in going up and down stairs, curb cuts, getting in and out of restaurants and rest rooms, etc. It is consciousness-raising of a very high order.

The third technique is *public commitment*. If you have individuals make a public statement to the effect that they intend to hire the physically disabled, to see to it that architectural barriers are removed, etc., they usually take steps towards doing what they've publicly committed themselves to do. In effect, most of them seem to feel that they have made a "promise" they feel obligated to keep. The promise may not be to any particular individual: it may be more to themselves than anything else, but when the promise is made publicly they are likely to follow through. If the promise is for employment, removal of architectural barriers, fund raising or any activity that brings them towards the physically disabled, it will probably also result in a more positive attitude.

The fourth technique is a subtle one with a complex name called *counter-attitudinal advocacy*. It is a bit artificial, but it is effective. First, you must find out the general attitude and belief system of an individual. Then you try to get that person to give a speech or write a paper in favor of the opposite of their belief system. It is what any good debating club member learns to do. For example, if an individual says that it really isn't wise to hire a person with a heart condition for a particular job, try to get that individual to give a 10- or 15-minute speech on why you *should* hire people with heart conditions for that particular occupation. Sometimes they have to do some research, but more important they have to do much serious thinking. This research or rethinking of the situation is much more convincing to them than an outsider could ever be.

Finally, there are two other considerations in changing attitudes. You can change the disabled person, and you can change the physical environment.

What we are referring to when we talk about changing disabled people is to change them so that they seem less different from physically normal people. Teach them to behave in ways which make them more similar than different. Let me use sports as an illustration. The overwhelming proportion of physically normal people are spectators in most sports rather than participants. Few physically normal adults play football, basketball, baseball, ice hockey, etc. Often, in the education of a young disabled person, the fact that they are not likely to be active team sports participants (wheelchair basketball aside), we fail to encourage them to develop an interest in sports, a knowledge of sports terminology, strategies, personalities, etc. You don't have to be an athlete to know about athletics. If there is no attempt to develop an interest in sports, there is little ability to carry on stimulating conversation in that area, and the young disabled person will be different from a large number of your physically normal people. Obviously, athletics is not the only topic of conversation. Young people do talk about music, the movies, and television, etc. If movie houses are inaccessible, that vehicle may also be lost as an opportunity for conversational interaction.

I believe we should also discourage students who are disabled from spending too much time with other disabled students... We have a large number of severely disabled students at Hofstra University. They have their own organization, and while there are good things about that, I think it is important that they not spend too much time with the organization but join others as well. The more they stay with other disabled people, the more they are unlike the physically normal students. If they spend proportionately more time with physically normal students, they will more likely be perceived as members of this group.

The second issue is changing the environment. It is important to make the world as physically accessible as possible; putting in ramps, elevators, curb cuts, make an enormous difference... But architectural changes are not enough. Often the disabled person finds even after access to a building is gained, employment is still denied because the equipment or hardware at the work station may not appear to be compatible with his or her physical disability. Often this is more a matter of modest imagination and modification than anything major. Attitude, again, often hinders change. A great deal of research in this area has been undertaken at the factory component of Human Resources Center (Abilities Inc.). Back in 1952, a job applicant arrived at the factory in a wheelchair and said that he wanted to be a lathe operator. He was told, "I'm sorry. We can't employ you in that job. You're in a wheelchair and you can't reach the controls at the top of the lathe." The man replied, saying that he was a lathe operator prior to his disability and he had a lathe in his home workshop. After his disability he simply cut the legs off his lathe, and operates it sitting down. We did a little research and found out that the lathe was one of the first tools developed during the Industrial Revolution. At that time, one was not permitted to "sit down at the job." The hours were long, the conditions difficult, and they wanted to be sure that no one could sleep on the job. Thus, the lathe was built on long, slim legs and was operated standing up. Yet, at that time, even at Abilities Inc. no one had thought about it. The legs were removed from lathes, and people can now operate them sitting down; in addition, at a lower level of energy expenditure... A little imagination and minor modification can be a major challenge to barriers to change.

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## WHEN YOU MEET A DISABLED PERSON...

1. Offer help but wait until it is accepted before giving it. Offering assistance to someone is only polite behavior. Giving help before it is accepted is rude. It can sometimes be unsafe, as when you grab the arm of someone using a crutch and the person loses his balance.
2. Accept the fact that a disability exists. Not acknowledging a disability is similar to ignoring someone's sex or height. But to ask *personal* questions regarding the disability would be inappropriate until a closer relationship develops in which personal questions are more naturally asked.
3. Talk directly to a disabled person, not to someone accompanying them. To ignore a person's existence in a group is very insensitive and it is always rude for two people to discuss a third person who is also present.
4. Don't park your car in a parking place which is specially designated for use by disabled people. These places are reserved out of necessity, not convenience. Some disabled people cannot walk distances, others need extra space in order to get wheelchairs in and out of the car. If you park in a handicapped space it may be convenient for you but totally prohibiting for disabled people.
5. Treat a disabled person as a healthy person. Because an individual has a functional limitation does not mean the individual is sick. Some disabilities have no accompanying health problems.
6. Don't assume that a lack of response indicates rudeness. In some cases a disabled person may seem to react to situations in an unconventional manner or may appear to be ignoring you. Consider that the individual may have a hearing impairment or other disability which may affect social or motor skills.
7. Keep in mind that disabled people have the same activities of daily living as you do. Many persons with disabilities find it almost impossible to get a cab to stop for them or to have a clerk wait on them in stores. Remember that disabled individuals are customers and patrons, and deserve equal attention when shopping, dining, or traveling.

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REGIONAL REHABILITATION RESEARCH INSTITOTE ON ATTITUDINAL, LEGAL AND LEISURE BARRIERS

The Regional Rehabilitation Research Institute on Attitudinal, Legal & Leisure Barriers (RRRI-ALLB) is located at George Washington University, Washington, D.C. (603 Park Lane Bldg,, 2025 Eye Street, N.W., Washington, D.C. 20052) and is funded by the National Institute of Handicapped Research, U.S. Dept. of Education. The RRRI-ALLB conducts research and prepares materials for rehabilitation professionals and the general public on attitudes related to disability. The following publications can be used to reduce attitudinal barriers toward people with disabilities.

*** BARRIER AWARENESS SERIES ***

- BARRIER AWARENESS: ATTITUDES TOWARD PEOPLE WITH DISABILITIES (Ed. by D. Cornelius) A book that addresses attitudes toward wheelchair users and people with deafness, blindness, mental retardation, and hidden disabilities. Contains myths & facts, "what to do" hints, examples, and sources of more information. Useful as a text or training tool & written for a general audience. $4.50
- THE INVISIBLE BATTLE: ATTITUDES & DISABILITY -- Attitudes of nondisabled people toward the general disabled community. 80¢
- BEYOND THE SOUND BARRIER -- Attitudes toward people with hearing impairment. 80¢
- FREE WHEELING -- Attitudes toward people who use wheelchairs. 80¢
- COUNTERPOINT -- Attitudes of disabled people toward nondisabled people. 80¢
- DIGNITY -- Attitudes toward people with mental retardation. 80¢
- SENSE ABILITY -- Attitudes toward people who are blind or partially sighted. 80¢
- INSIDE OUT -- Attitudes toward people with hidden disabilities (e.g. epilepsy, diabetes, cancer). 80¢
- PERSPECTIVES -- Attitudes toward people with specific learning disabilities. 80¢
- OVERDUE PROCESS: PROVIDING LEAGAL SERVICES TO DISABLED CLIENTS -- How attitudes affect a disabled person's access to the legal system. Contains resource listings of relevant journals & organizations. 80¢
- PARTNERS -- Attitudes of rehabilitation counselors & disabled clients toward each other. 80¢
- GETTING TOGETHER -- Attitudes toward the sexuality of disabled people. 80¢
- FAIR PLAY -- Attitudes toward disabled people and recreation. 80¢

SEND ORDERS TO: RRRI-ALLB Publications
603 Park Lane Bldg., 2025 Eye St., N.W.
Washington, D.C. 20052

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Source: The Invisible Battle: Attitudes And Disability. Regional Rehabilitation, Research Institute on Attitudinal, Legal, & Leisure Barriers. Barrier Awareness Project. Washington, D.C.: RRRI-ALLB Publications, p.12.

# ACCESS AND SAFETY

*In general, the physical environment of our Nation's communities continues to be designed to accommodate the able-bodied, thereby perpetuating the isolation and dependence of disabled persons.*

*— A National Policy for a Barrier Free Environment*

## PROGRAM ACCESSIBILITY: FOCUS ON PROGRAMS, NOT BUILDINGS

Source: A Guide to College/Career Programs for Deaf Students. Prepared by Gallaudet College and NTID, 1978, p.53, Photo by Arthur Jillette, New Hampshire Vocational Education College.

Does program accessibility mean that every building on campus must be architecturally barrier free?

NO. Program accessibility means that each program or activity, when viewed in its entirety, be readily accessible to handicapped persons. This does not mean that every building or area of a campus be barrier free. It does mean that all programs and activities must be available in an accessible location to handicapped people. For example, if there is no way for a student in a wheelchair to get to a biology laboratory on the third floor of a building, then similar laboratory facilities must be provided in a location where they can be reached. Other methods that can be used to achieve program accessibility include redesigning equipment, reassigning classes, and moving necessary student services to accessible locations.

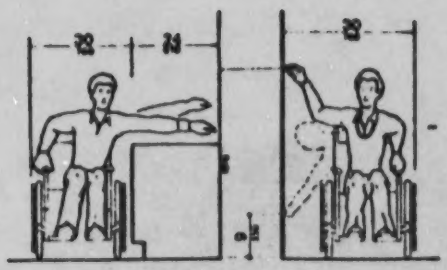
Source: "Higher Education for Handicapped Students." ERIC Factsheet. ERIC Clearinghouse on Handicapped and Gifted Children, Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

## What is Barrier-Free Design?

This form of architectural design means the elimination of all barriers which would hinder access or functioning of the handicapped and non-handicapped, the young and the old.

Section 503 mandates reasonable accommodation (i.e., accessibility) at the work site, but not a barrier-free workplace. That means eliminating specific barriers, but not all barriers. For example, in a metal manufacturing plant, the jobs on the pot lines, which would be hazardous to persons with severe disabilities, would not normally be considered open to workers with severe handicaps. Therefore, if the safety factors precluded employing handicapped persons, it was concluded that restrooms in that area of the plant need not be made accessible, although technically they have architectural barriers.

Many building codes adopted around the country dealing with accessibility for the handicapped are based on the American National Standards Institute A117.1-1961 (R1971), "Specifications for Making Buildings and Facilities Accessible to, and Useable by, the Physically Handicapped." The ANSI standards, which include accessible building specifications for restrooms, parking areas, walkways, ramps, entrances, elevators, floors, etc., are being revised and expanded to include areas such as housing. Although these standards are considered the federal minimum, other national building codes and federal standards may differ. State and local codes may also differ from the ANSI standards.



## Can Accessibility be Achieved Through Alternatives to Architectural Change?

The familiar and widely-used symbol of accessibility (white wheelchair on blue background) is generally assumed to indicate architectural accessibility. However, there is more to access—and accommodation—than the elimination of structural barriers.

The barriers that may prevent a qualified blind worker from performing a job may extend beyond the presence of stairs or the absence of an elevator. Job-related barriers which restrict qualified deaf employees, or applicants who have perceptual handicaps, may have little relation to the architectural design of the workplace.

Section 503 and 402's accommodation provisions are interpreted to include modifications in the work environment that may not be architectural, but which often can be achieved through creative space management. Since the regulations do not require that all work areas be made accessible (only those areas used by handicapped employees), many employers are finding that they are sometimes able to assign a handicapped worker to an area of the work facility that is already accessible, or which can be made accessible with limited modification. One example is a factory worker on crutches who was assigned to an accessible work station at the front of the plant, rather than a station at the rear of the plant which could be reached only by climbing a steep flight of stairs.

Another firm used the concept of creative space management when they assigned a worker who used a wheelchair to a first floor office. The company's accounting office, originally on the second floor of a building with no elevator, was transferred to the first floor to accommodate the company's newly hired handicapped accountant.

Workers who are blind or deaf have accessibility needs that are often overlooked. Aural fire alarms are of no use to a deaf worker. An alarm that flashes as well as rings can be a reasonable accommodation. Flashing exit signs are accommodations to workers with limited vision.

Source: Everything You've Always Wanted to Know About Sections 503/402. Washington, D.C., Mainstream, Inc., 1982.
Available from: Mainstream, Inc., 1200 15th Street, N.W., Washington, D.C. 20005 (202/833-1136).

## RESOURCES FOR ADAPTED EQUIPMENT AND TECHNIQUES

Schools receiving federal funds are required by law to make "reasonable accommodation" in programs so they are accessible to physically handicapped students. Most of the information available thus far about accommodation in educational programs has concerned building design and has been directed toward administrators. However, individual teachers can do a great deal on their own to make their classes more accessible to students with disabilities.

An accommodation (also called an adaptation) is a modification of a work place or the work itself which enables a handicapped person to perform. It can make it possible for such a person to succeed in an occupational area which originally seemed inappropriate because of physical limitations. An accommodation can be as simple as wrapping a strip of foam rubber around a pencil so that it is easier to grasp, or as complex as using an electronic arm which automatically reaches for objects. It can mean so small a matter as dividing break time into three five-minute rest periods during the morning, or the more costly replacement of a stairway with a ramp. . .

"The resources and readings accompanying this article are the most practical ones I am aware of. Many have pictures or step-by-step instructions."

### Tools and Machinery

*Aids and Appliances for the Blind and Visually Impaired.*
American Foundation for the Blind
15 West 16th St.
New York, N.Y. 10011

Brookstone *Hard-to-Find Tools and Other Fine Things*
127 Vose Farm Road
Peterborough, N.H. 03458

*A Handbook of Workshop Production Aids*
Facilities Development Section
Department of Rehabilitation
California Health and Welfare Agency
Sacramento, Calif. 95814

*Help Yourself Aids*
Fred Sammons, Inc.
Box 32
Brookfield, Il. 60513

*Tools, Equipment and Machinery Adapted for the Vocational Education and Employment of Handicapped People*
Wisconsin Vocational Studies Center
964 Educational Sciences Building
1025 West Johnson St.
Madison, Wisc. 53706

"Vocational Aids and Enhanced Productivity of Severely Disabled," by Mallik and Mueller
The George Washington University
Rehabilitation Research and Training Center
Washington, D.C. 20037

### Adaptations for Service Occupations

*Adaptations and Techniques for the Disabled Homemaker*
Sister Kenny Institute
1800 Chicago Ave.
Minneapolis, Minn. 55404

*Mealtime Manual for People with Disabilities and the Aging*
New York University Medical Center
400 East 34th St.
New York, N.Y. 10016

### Mobility and Communications Aids

*Be OK Self-Help Aids*
Box 32
Brookfield, Il. 60513

*Green Pages Rehab Source Book*
P.O. Box 1586
Winter Park, Fla. 32790

*Telephone Services for the Handicapped*, by Sullivan, Frieden and Cordery
Institute of Rehabilitation Medicine
New York University Medical Center
400 East 34th St.
New York, N.Y. 10016

*Type with One Hand*, by Richardson
South-Western Publishing Co.
Cincinnati, Ohio

### Adaptations for Blind Students

*Products for People with Vision Problems* and *Vocational Schools as Training Facilities for Blind Workers*, by McAulay
American Foundation for the Blind
15 West 16th St.
New York, N.Y. 10011

*Typewriting for Blind Students*
American Printing House for the Blind
1839 Frankfort Ave.
P.O. Box 6085
Louisville, Ky. 40206


**Readings**

Asher, Janet and Asher, Jules "How to Accommodate Workers in Wheelchairs." Washington, D.C.: The President's Committee on Employment of the Handicapped.

Cooper, N. "Vocational Reintegration of Handicapped Workers with Assistive Devices." *International Labour Review*. May/June, 1977.

Dunn, D. *Placement Services in the Vocational Rehabilitation Program*. University of Wisconsin-Stout, 1974.

Garris, A. "Assistive Devices." Unpublished paper. Downey, California: Rancho Los Amigos Hospital.

Glazzard, Peggy. "Adaptations for Mainstreaming." *Teaching Exceptional Children*. Fall, 1980, 26-29

Griew, S. *Adaptation of Jobs for the Disabled*. Geneva: International Labour Office, 1969.

Milk, Leslie. "What is Reasonable Accommodation?" *Disabled USA*. 1 (8), 1978, 4-6.

Phelps, C. and Lutz, R. *Career Exploration and Preparation for the Special Needs Learner*. Boston: Allyn and Bacon, 1977.

Worrall, J. and Mrowka, L. "Industrial Arts with Modifications." *School Shop*. April, 1978.



**About the author**

Cynthia Creighton, former coordinator of The Adapting Vocational Education for Handicappers Project, at Ingham Intermediate School District, Mason, Michigan, is now instructor of occupational therapy at Eastern Michigan University.



Source: Creighton, C. A Common Sense Guide to Reasonable Accommodation. VOC ED Journal of the American Vocational Association, 1981, 56(3), 55-8.

# GUIDELINES FOR CAMPUS LIFE SAFETY AND THE HANDICAPPED

Linda Donnels
George Washington University

I. IDENTIFICATION OF STUDENTS WITH DISABILITIES

A. Who would be considered disabled for life safety planning?

1. Students with disabilities as defined by Section 504 of the Rehabilitation Act of 1973
2. Students who are temporarily disabled due to injury
3. Students temporarily disabled due to drug or alcohol use
4. Students with hidden disabilities
5. Students who panic

B. How can disabled students be identified?

1. Stress self identification for safety reasons
2. Use disabled student services office as resource
3. Ask staff to be attuned to temporarily disabled students

II. ESTABLISHMENT OF A LIFE SAFETY AND THE HANDICAPPED COMMITTEE

A. Who should be on the Committee?

1. A top level administrator with clout
2. Representatives from the following areas:
   a. Safety and Security
   b. Disabled Student Services
   c. Student Life/Housing
   d. Students (disabled and non-disabled)
   e. Planning/Physical Plant
   f. Health Service
3. Local fire department representatives

B. What should the Committee do?

1. Design a campus life safety plan
2. Write guidelines for residential and public buildings which are emergency specific
3. See that the plan is implemented
4. Integrate procedures for evacuating disabled people into regular procedural guidelines
5. Have input into new building design (review plans for access, egress and safety features)
6. Evaluate and update the plan
7. Encourage students to take an active role in their own life safety

III. A LIFE SAFETY EDUCATION PROGRAM: PLANNING FOR CAMPUS AWARENESS

A. Combine life safety education for the handicapped in regular campus life safety programs

B. Use creative approaches to programming
1. Peer education (students who have been in fires, for example)
2. Simulations (mock-up danger areas, obstacles or injury during evacuation)

C. Encourage students to take responsibility for themselves

D. Include handicap awareness programs

E. Market the program well

1. Use students to publicize
2. Include information applicable to disabled individuals in life safety brochures, posters and handouts
3. Present information realistically

F. Give attention to prevention to stop potential disasters

IV. BUILDINGS, DESIGN AND ENVIRONMENTAL MODIFICATIONS

A. Planning buildings and renovations

1. Life Safety Committee should have design input
2. Review plans for access, egress and accessible equipment
3. Review all projects to see how future buildings can be improved
4. Review for change in building use

B. Design

1. Alarm systems and smoke detectors - adapt for hearing impaired students with strobe light, vibrator or fans
2. Stress the "human care system" - other students warn disabled students on the way out
3. Use a horn-type alarm instead of bells
4. Install telephone alarm systems (accessible phones)
5. Use computer monitor system to detect fire or smoke
6. Issue beeper or accessible phone for students not independently mobile

C. Areas of refuge

1. Design accessible areas of refuge
2. Publicize where they are and how long one can safely stay there
3. Investigate use of dormitory room as area of refuge

D. Escape routes and exits

1. Should be well-marked
2. Indicate accessible exits
3. Install tactile markers along exit route
4. Keep ramps unblocked at all times

E. Safety hazards should be well-marked or cordoned off

F. Elevators

1. Emergency phones and buttons should be accessible
2. Use or non-use of elevators in emergencies should be publicized

G. Equipment

1. Install or retrofit alarm pull stations to be no more than forty eight inches from the floor; place near stairwells
2. Install hand-held fire extinguishers thirty six inches from the floor adjacent to existing fire extinguishers
3. Install accessible emergency phones or intercoms

V. TRAINING

A. Training of students with disabilities

1. Students should:
   a. Participate in all drills and training
   b. Practice escape routes and alternative routes
   c. Know how to help others help in evacuations
2. The program should:
   a. Use peer training
   b. Involve Disabled Student Services staff in identifying training needs

B. Training of staff

1. Apprise the staff of their responsibilities under the building emergency plan
2. Offer periodic refresher courses
3. Involve department managers in training
4. Provide first aid/CPR training
5. Offer training as staff is replaced
6. Train if appropriate, in lifting techniques and other specific concerns involving severely disabled students
7. Provide handicap awareness programs
8. Stress asking the student what assistance is needed before acting

VI. RESIDENCE HALL CONCERNS

A. Select appropriate means of student identification

1. Provide list of names to head resident? campus security
2. Mark rooms or windows with decal or accessibility symbol
3. Give student flag to display in window during emergency
4. Consider confidentiality or personal safety constraints

B. Offer accessible fire safety programs with content applicable to permanently or temporarily disabled persons

C. Involve disabled students in planning or conducting programs

D. Adapt equipment (alarm, smoke detector) for specific residents' needs

E. Plan in advance procedures for persons who are not independently mobile

F. Eliminate false alarms

1. Involve students in figuring out ways to stop false alarms
2. Set stiff penalties for violations
3. Provide realistic information on dangers of false alarms

VII. RIGHTS, RESPONSIBILITIES, AND LIABILITIES

A. Consider disabled students' rights

1. Right to make choices
2. Right to same living options as other students
3. Freedom of movement and access to campus

B. Give students life safety information and encourage students to make informed decisions

C. Stress that each student has the ultimate responsibility for himself or herself

D. Consult the university's insurance carrier for information on liabilities

VIII. COMMUNITY RESOURCES

A. Use local fire department officials and public education specialists in programs and planning

B. Involve disabled people from the community as regular resources

C. Use the resources of fire fighting and safety associations

CONCLUSION

These guidelines are just a starting point for shaping a total campus life safety plan. For any campus plan to be effective, it should include plans for the safety of people with disabilities. Since each campus is different, urban or rural, commuter or residential, elements within the plan may differ. However, the consensus of the participants at the conference on "Life Safety and the Handicapped: College Concerns" was that life safety is for everyone. Updating campus plans makes a safer campus for everyone and that is the goal after all.

* * *

Reproduced from
The Accessible Institution of Higher Education:
Opportunity, Challenge and Response

The Proceedings of the 1981 AHSSPPE Conference
Association on Handicapped Student Service Programs in
Postsecondary Education (AHSSPPE)
P.O. Box 886; Ames, Iowa 50010 c 1981

## GENERAL LABORATORY SAFETY PRACTICES

1. Always discuss procedures and any special safety considerations with the students before allowing an experiment to begin.

2. Arrange and discuss evacuation plans for fire and other emergencies. Review such plans periodically.

3. Give all students safety quizzes or safety-rule sheets to read, sign, date, and return to the instructor. Go over these procedures and rules with the students.

4. Post copies of the safety rules at several locations in the lab and give a copy to each student.

5. Give the student with impaired vision an opportunity to become familiar with the laboratory before the first session. The student can then participate in the safety-orientation program with little trouble and will already know the locations of exits, showers, and extinguishers.

6. Discuss and resolve individual limitations with the student with impaired vision who has no full-time lab assistant. Can the student read labels? Any operations too risky for the student to handle alone?

7. Keep all aisles free of obstructions; do not use shower area for temporary storage.

8. Ensure that reagent containers are labeled clearly and returned to their shelves after each use. These shelves should be readily accessible to the handicapped student.

9. Assign the student with impaired mobility to a lab station on an outside aisle and close to an accessible exit, if possible. Students with impaired hearing should have lab stations that afford an unobstructed view of the instructor.

10. Insist on the use of eye-protection devices such as goggles or safety glasses with clear side shields.

11. No students should pour from large containers of concentrated acids or bases. Reagent containers too large to be easily grasped by one hand have no place in any instructional chemistry laboratory.

12. Students, including those with impaired vision or poor manual coordination, are strongly urged to wear rubber gloves when working with harsh chemicals or those readily absorbed by the skin.

13. All students should wear plastic or rubber aprons when working with chemicals in order to protect their clothing. Students in wheelchairs or those who have no sensory perception in the lower half of the body should be advised of the importance of protecting their laps with a heavy rubber apron.

14. Employ the buddy system in the lab for assistance in emergencies.

15. Prohibit both able-bodied and handicapped students from working in the lab alone.

16. Accessible and usable eye washes should be located near the handicapped student's work station.

17. Equip laboratories with emergency lighting (using batteries or another power supply) in case of power failure. Emergency lighting is particularly needed for deaf students who rely on visual clues.

18. When a deaf student is working in a lab, it is helpful to have available equipment with lights or other visual means of indicating on/off status, although most equipment can be monitored easily by touch. Alarm systems also should be visual, with flashing lights. Expensive changes to equipment are seldom needed for deaf students (e.g., they can feel when a timer sounds if they hold it in their hands).

19. Ensure that combustible gas supplies from the gas jets on the benches contain odorants. Students with impaired hearing may not hear the sound of an open jet, although they will be more inclined to check visually than will students who can hear.

20. Lightweight fire extinguishers should be provided for mobility-impaired students; all students should be instructed in the use and limitations of fire extinguishers and in fire drill procedures.

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Source: Reese, K.M. (Ed.). Teaching Chemistry to Physically Handicapped Students. Washington, D.C.: American Chemical Society, 1981, pp. 18-20.
Available from: American Chemical Society, Committee on the Handicapped, 1155 16th Street, N.W., Washington, D.C. 20036, Phone 202/872-4600.

This 42 page manual gives specific information about teaching chemistry in the classroom, in the laboratory, as well as discussing laboratory safety and methods of testing and evaluating student progress. Much of this information and adaptations are equally pertinent to teaching other laboratory sciences.

## CONSIDERATIONS IN THE EVACUATION OF DISABLED PERSONS

It is recommended that the college or university consult with local fire officials on the whole matter of emergency evacuation procedures. A representative from the fire department could address a general faculty meeting or a report of such a meeting could be distributed to faculty. If such information is not available, it would be well to request the college or university administration to set up guidelines prior to any emergency situation. In the case of fire drills, careful thought should be given to provisions for disabled persons.

Visually Impaired Persons

Most visually impaired persons will be familiar with the immediate area they are in. In the event of an emergency, tell the person the nature of the emergency and offer to guide him/her to the nearest emergency exit. Have the person take your elbow and escort him/her (this is the preferred method when acting as a "sighted guide"). As you walk, tell the person where you are and advise of any obstacles. When you have reached safety, orient the person to where he/she is and ask if any further assistance is needed.

Hearing Impaired Persons

Although some modern buildings are equipped with flashing light alarms, most buildings are equipped with sound alarms. Therefore, persons with impaired hearing may not perceive emergency alarms and an alternative warning technique is required. Two methods of warning are: 1. writing a note telling what the emergency is and the nearest evacuation route. For example: "Fire--out rear door to the right and down. Now!" 2. turning the light switch on and off to gain attention, then indicating through gestures or in writing what is happening and what to do.

Persons Using Crutches, Canes, or Walkers

Such persons should be treated as if they were injured persons for evacuation purposes. Carrying options include using a two-person lock arm position or having the person sit in a sturdy chair, preferably one with arms.

Non-Ambulatory Persons

Most non-ambulatory persons will be able to exit safely without assistance if on the ground floor. Some people have minimal ability to move and lifting them may be dangerous to their well being. Non-ambulatory persons' needs and preferences will vary. Always consult the person as to his/her preference with regard to:

- Ways of being removed from the wheelchair.
- The number of people necessary for assistance.
- Whether a seat cushion or pad should be brought along with him/her if he/she is removed from the chair.
- Whether to extend or bend extremities when lifting because of pain, catheter, leg bags, spasticity, etc.
- Being carried forward or backward on a flight of stairs.
- After-care if removed from the wheelchair; i.e., whether a stretcher, chair with cushion pad, car seat, or perhaps paramedic assistance is necessary.

Additional Things To Consider:

- Wheelchairs have many movable or weak parts which were not constructed to withstand the stress of lifting (e.g., the seat bar, foot plates, wheels, movable arm rests).
- Some people in wheelchairs may have electrical artificial respirators attached. They should be given priority assistance if there is smoke or there are fumes, as their ability to breathe is seriously jeopardized.
- Some people have no upper trunk or neck strength.
- If the wheelchair is left behind, remove it from the stairwell and place it so it does not block others.
- Remove the batteries from a power wheelchair before attempting to transport it. Make sure the foot rests are locked and the motor is off.
- If a seatbelt is available, secure the person in the chair.
- If carrying a person more than three flights, a relay team arrangement may be needed.
- In the event of emergency, people in wheelchairs and other disabled persons should observe the following procedure for evacuation:
  - All persons shall move toward the nearest marked exit. As a first choice, the wheelchair occupant or other disabled person may attempt to use the elevator (except in case of fire or earthquake).
  - As a second choice, when a wheelchair occupant reaches an obstruction, such as a stairway, s/he should request assistance from others in the area.

Note: It is suggested that the wheelchair occupant or other disabled person, when possible, prepare for emergencies ahead of time by learning the locations of exit corridors and smoke tower stairwells and by showing a classmate or instructor how to assist him/her in case of emergency.

- If choices #1 or #2 are not successful, the wheelchair occupant or other disabled person should stay in the exit corridor or on the landing in the smoke tower stairwell. S/he should continue to call for help until rescued. Persons who cannot speak loudly should carry a whistle or have some other means for attracting the attention of others.

Note: All exit corridors and smoke tower stairwells are marked with exit signs and are protected with self closing fire rated doors. These are the safest areas during an emergency.

- Rescue personnel (Fire and Police) will first check all exit corridors and exit stairwells for any trapped persons.

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Source: Smith, L.M. The College Student With a Disability: A Faculty Handbook. Washington, D.C.: U.S. Government Printing Office, 1980, pp. 26-27.
Available from: The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

MONROE COMMUNITY COLLEGE

memorandum

TO: All Faculty and Staff FROM: Patricia A. Falanga, R.N.

RE: Health Service Information DATE: Fall 1979

**First Aid and Emergency Procedures**
Attached sheet with instructions

**Handicapped Students**
Please note any visually or physically handicapped students in your immediate surroundings and be alert to their needs. Attached are also Instructions for Non-Ambulatory students. These instructions are given to all Non-Ambulatory students who are in contact with Health Services Department.

Handicapped Parking Permits are available as well as Library Elevator Key Request Forms from Health Services Office (key issued by Security Department after approval by Health Services Office).

**First Aid Kits**
Available from Health Services Office. If you already have a kit it may be refilled by bringing it to the Health Services Office.

**Hours**
Health Services Office is open Monday through Thursday from 8:00 a.m. until 6:00 p.m. and Friday 8:00 a.m. to 4:45 p.m. starting September 4, 1979.
Phone Extension 7156

## FIRST AID AND EMERGENCY PROCEDURES FROM YOUR HEALTH SERVICES

Request someone to contact the College Nurse:
1) VIA INTERCOM and Instructional Services will connect you immediately with Health Services;
2) If unable to contact Instructional Services IMMEDIATELY, call Security, EXT. 7120, or send someone to the Security Desk for assistance; or
3) Call Health Services: EXT. 7156

The Nurse will evaluate the situation and will advise you concerning the ill or injured person's mode of transportation to Health Services for care.

If a person BECOMES FAINT i.e: facial color becomes pale and beads of perspiration may be noted:
1. If necessary calmly request all but 2 persons to leave classroom or lab for a few minutes;
2. Advise person to loosen tight clothing around neck and waist;
3. Advise him to lie down on the floor; elevate legs so his feet are higher than his head; he should slowly take a deep breath and cough forcibly until he feels better.

If a person FAINTS or HAS A CONVULSIVE SEIZURE:
1. Calmly request all but 2 persons to leave classroom or lab for a few minutes;
2. Loosen tight clothing around neck and waist;
3. Gently ease person to the floor;
4. DO NOT ATTEMPT TO CONTROL BODY MOVEMENTS!
5. If the person seems to have respiratory difficulty, keep his air passageway open by tilting the head way back and pulling the jaw upward.

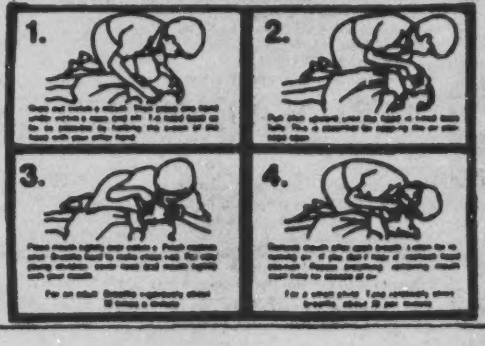
If a person is BURNED:
1. Flush the burned portion of the body with large quantities of cool water as soon as possible;
2. DO NOT APPLY OINTMENT OR ANY TYPE OF MEDICATION!

If a person is INJURED:
1. If bleeding, cover that part with a clean piece of material or paper towel and apply pressure;
2. DO NOT ATTEMPT TO MOVE THE PERSON!

If a person is CHOKING:
1. Open his mouth. Insert your finger, keeping it well to the side of the throat. Attempt to hook the food and flip it up from the obstructed area; or you may try:

The Heimlich Maneuver:
1. Stand behind the person and wrap your arms around his waist;
2. Allow his head, arms and upper torso to hang forward;
3. Make a fist with one hand, grab it with the other. Place the fist against the person's abdomen, slightly above the navel and below the rib cage;
4. Press your fist into the person's abdomen with a forceful upward thrust; Repeat if necessary.

If a person HAS STOPPED BREATHING: Use Mouth-to-Mouth Rescue Breathing:




## FIRE

IN CASE OF FIRE, GIVE THE ALARM BEFORE YOU DO ANYTHING ELSE. KEEP CALM. CALL SECURITY - EXT 7120

If your clothing catches fire, don't run. Get under a laboratory shower if one is nearby. Otherwise, wrap yourself in a fire blanket or coat, or roll on the floor. Running fans flames and intensifies fire.

When alarm sounds in the building, move toward nearest exit or stairway. Most stairways are fire resistive if the doors are kept closed. If the stair tower is involved or obstructed, select an alternate.

If possible, shut off power to any machinery; shut off gas or other open flames; shut doors and windows.

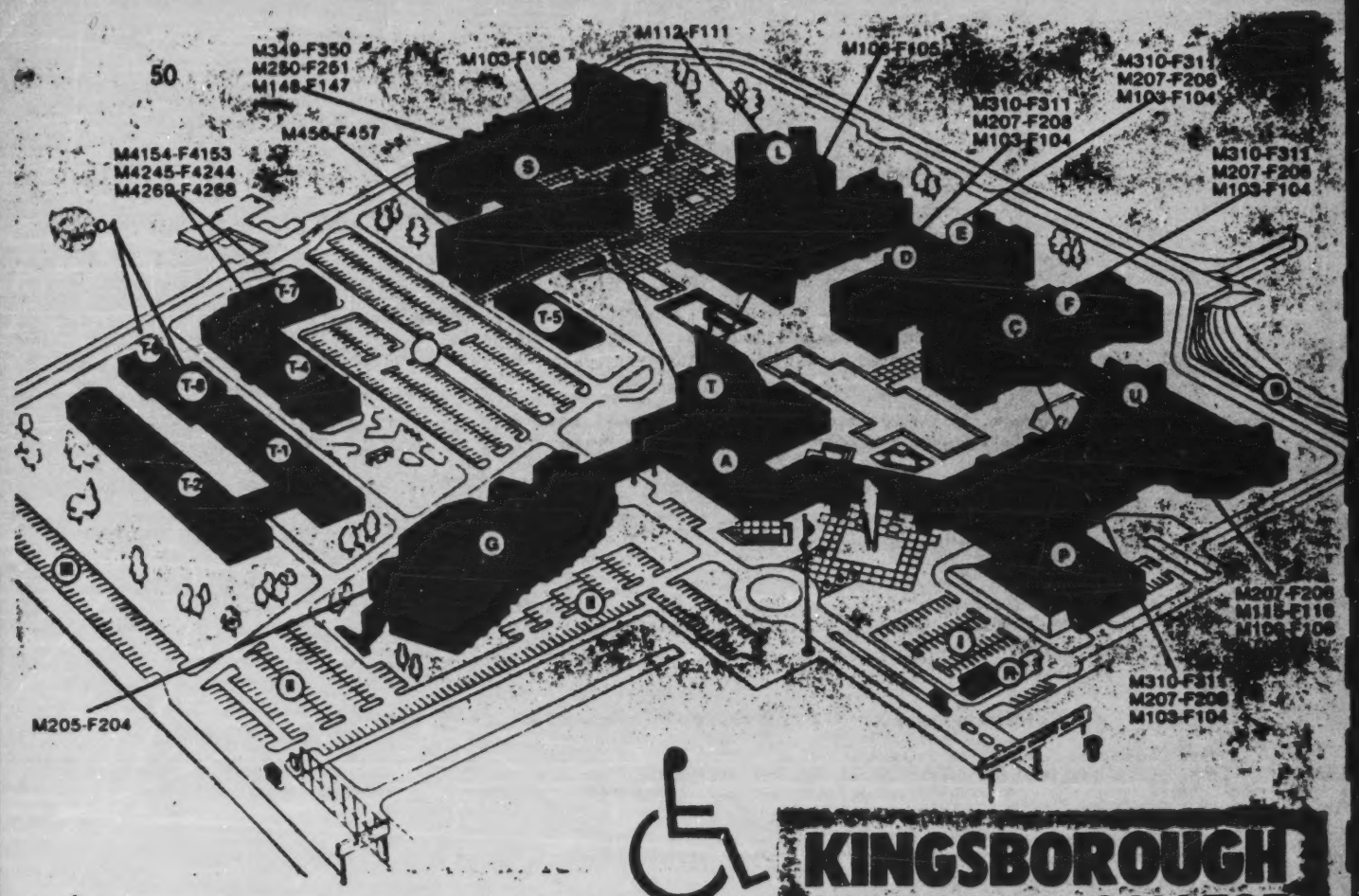
Upon leaving the building, do not remain at entrances.

Do not use elevators.

Do not re-enter the building.



MONROE COMMUNITY COLLEGE




# KINGSBOROUGH
## COMMUNITY COLLEGE
of The City University of New York
2001 Oriental Blvd., Brooklyn, NY. 11235

## KCC FACILITIES

Relatively free of barriers, the campus features easy access into its interconnected buildings in which there are ramps, elevators, special facilities to accommodate handicapped students (toilets, water fountains, public telephones, etc.). Accessible male and female toilets (indicated on map above as M or F) are identified by the LOGO on the door.

### A (ADMINISTRATION) BUILDING
Ramp to Right of Entrance
Electric Door at Entrance
Bookstore, Bridge Entrance, Cafeteria, Library, Registration Entrance, West Academic Cluster
First Floor—Health Office
(Medical and Emergency Service)
Toilets (see map above)
Elevator, Telephone
Second Floor—Telephone, Water Fountain, Elevator

### C-D E-F (WEST ACADEMIC CLUSTER) BUILDINGS
Classrooms and Counseling Offices (accessible by electric door at "P" and "A" Building entrances)
Math Skills Laboratory
Ext. 5808, Room F206 (accessible by elevator)
Water Fountains, Restrooms, Toilets (see map above) (accessible by elevator at each floor)

### L (LIBRARY) BUILDING
Library (accessible by Electric Door at "P" Building Entrance)
Lower Level (accessible by ramp or elevator)
Computer Center, Ext. 5840, Room L117.
English Skills Laboratory,
Ext. 6406 Room L219
Tutorial Services
Ext. 6118 Room L505
Media Center Ext. 5074 Room L118
Student Area
Toilets (see map above)

### P (SERVICE AREA) BUILDING

### S (ARTS and SCIENCE) BUILDING
Ramped entries, both sides of Main Entrance
Elevator to three floors
Water Fountains
Toilets (see map above)

### T-4 BUILDING
Snack Bar
Water Fountain
Toilets (see map above)

### T-5 BUILDING
Water Fountain
Toilets (see map above)

### T-7 BUILDING
Water Fountain, Telephone

### T-8 BUILDING
Elevator (with direct telephone to Security)
Toilet (see map above)

# DATA PROCESSING

**(see also: DATA PROCESSING: OPERATIONS)**

At a few schools the data processing program is divided into two options. At Manhattan, LaGuardia and Genesee, for example, students may choose between programming and operations. At Alfred, they may choose between a science-oriented course of study and a business-oriented course of study, both encompassing programming and operations.

Generally, programs provide study experiences for careers as programmers, systems analysts and technicians for educational and scientific institutions, business and government which use computers to process, store, retrieve and display data efficiently and quickly.

Courses may include mathematics, statistics, accounting, business management, computer systems, programming, programming languages such as Cobol, Basic, BAL, RPG, Fortran and Assembly, data processing principles, problem-solving logic, computer operations and field work. Physics and calculus appear to be offered only as part of the science-oriented option at Alfred.

Graduates may find positions as junior programmers, computer operators, machine supervisors, research data analysts, coders or programming librarians.

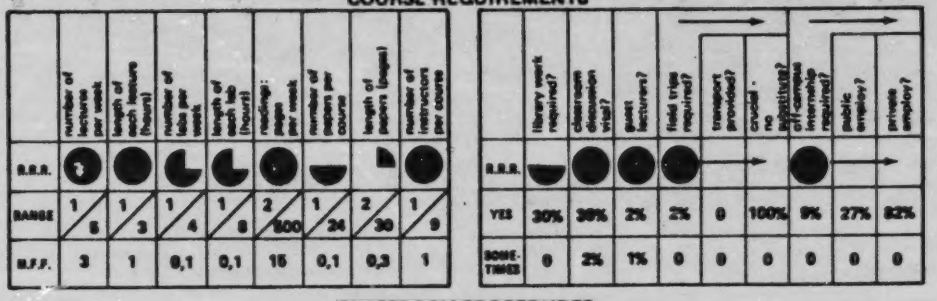
## OFFERED AT:

| | | | |
|---|---|---|---|
| Adirondack | | Jamestown | |
| Alfred | | Jefferson | |
| Borough of Manhattan | • | Kingsborough | • |
| Bronx | | LaGuardia | • |
| Canton | • | Monroe | • |
| Cayuga | • | Morrisville | |
| Cobleskill | | Nassau | • |
| Corning | | New York City | |
| Delhi | | Niagara | |
| Dutchess | | Orange County | |
| Erie/North | • | Queensborough | • |
| Farmingdale | | Staten Island | |
| Fulton-Montgomery | • | Suffolk/Selden | • |
| Genesee | • | Tompkins-Cortland | • |
| Herkimer | | Ulster | • |
| Hudson Valley | | Westchester | • |

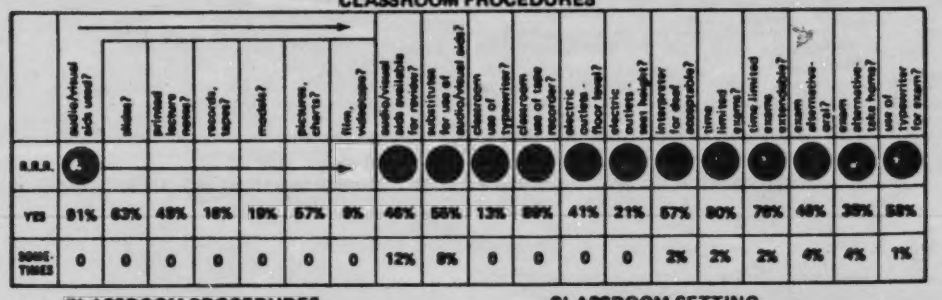
**full or partial response to questionnaire*

## ACADEMIC TASKS: CLASSROOM SETTING

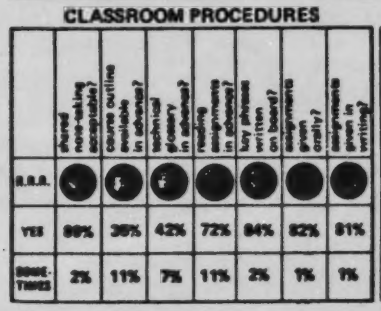
### COURSE REQUIREMENTS



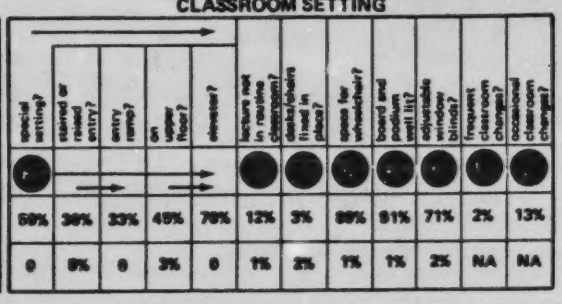

### CLASSROOM PROCEDURES




### CLASSROOM PROCEDURES




### CLASSROOM SETTING

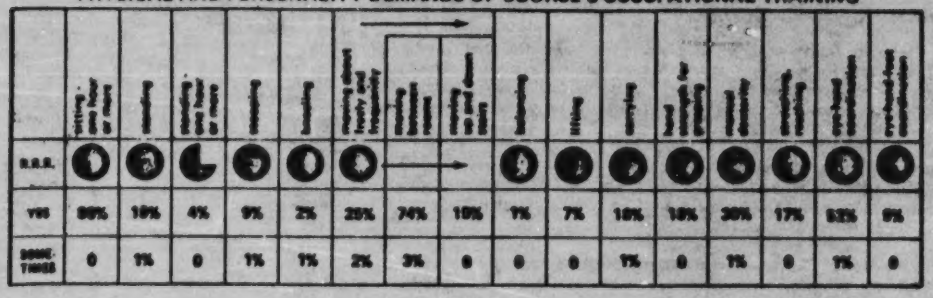



Source: Vocational Education: A Manual of Program Accessibility for the Physically Disabled Two-Year College Applicant. State University of New York, Coordinating Area No. 4, Research Project, sponsored by New York State Education Department, Bureau of Two Year College Programs, pp.70-3.
Available from: Agent Campus for the Project, SUNY State College of Optometry, 100 East 24th Street, New York, N.Y. 10010. Telephone: 212/477-7180

This manual and its predecessor in 1976 provide program guidance and counseling for physically disabled two year college applicants. It provides a potential handicapped student with a profile of the instructional demands and the range of performance expectations for 50 occupational programs at SUNY-CUNY public community colleges and Agricultural and Technical Colleges in New York State.

# ACADEMIC TASKS: LAB/SHOP/FIELDWORK SETTING

PHYSICAL AND PERSONALITY DEMANDS OF COURSE'S OCCUPATIONAL TRAINING



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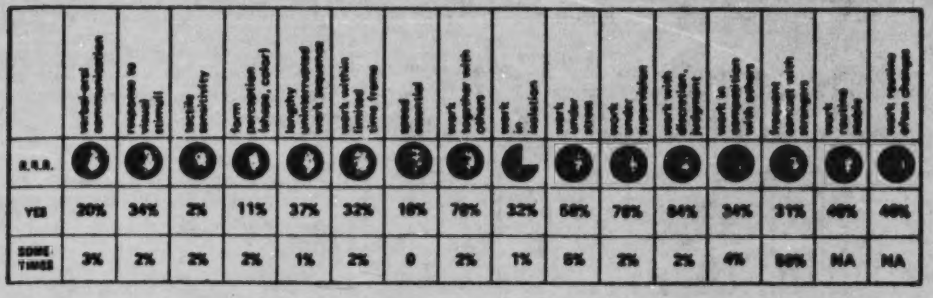
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G.E.D. | | | | | | | | | | | | | | | | |
| YES | 89% | 19% | 4% | 9% | 2% | 25% | 74% | 19% | 1% | 7% | 18% | 18% | 30% | 17% | 83% | 9% |
| SOME TIMES | 0 | 1% | 0 | 1% | 1% | 2% | 3% | 0 | 0 | 0 | 1% | 0 | 1% | 0 | 1% | 0 |



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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G.E.D. | | | | | | | | | | | | | | | | |
| YES | 20% | 34% | 2% | 11% | 37% | 32% | 18% | 78% | 32% | 58% | 78% | 84% | 34% | 31% | 48% | 48% |
| SOME TIMES | 3% | 2% | 2% | 2% | 1% | 2% | 0 | 2% | 1% | 8% | 2% | 2% | 4% | 88% | NA | NA |

## THE PHYSICAL PROFILE: A DETAILED SAMPLING

as reported by school respondents

**Special Projects:** up to ten computer programs for a course, some keypunched by students; flow charts; team project to design a theoretical computer system; problem solving; written reports; case studies; work-study; accounting practice set.

**Special Settings:** keypunch workshops; computer laboratories; classroom with large worktables.

**Special Tools and Equipment:** computer console, card reader, printer, tape and disk driver, keypunch machine, other standard data processing equipment, flip charts, flow chart templates, rulers, calculators, audio-visual equipment.

**Special Physical Demands:** dexterity and coordination to reach controls, manipulate dials, knobs and keyboards of equipment listed above; vision to read computer responses; strength to lift card decks weighing up to 15 pounds; long attention span for programming.

## THE WORK PLACE: Examples of Job Characteristics and Descriptions Based on the Dictionary of Occupational Titles.

**JOB DESCRIPTIONS:**

**Programmer, Detail (Junior Programmer):** selects symbols from coding system peculiar to model of digital computer and applies them to successive steps of program for conversion to machine processable instructions.

**WORKER TRAITS:**

Programmers should be interested in systematic, numerical data-gathering procedures and detail, have a reasonable level of form perception and eye-hand coordination.

**JOB CHARACTERISTICS:**

| Job Title | Physical Demand | Setting | Climb, Balance | Kneel, Stoop | Reach, Handle, Finger | Talk, Hear | See | Eye-Hand-Foot Coord. |
|---|---|---|---|---|---|---|---|---|
| Programmer, Detail | Sedentary | Indoors | | | √ | | √ | |
| | | | | | | | | |
| | | | | | | | | |

**PROFESSIONAL ASSOCIATIONS:**

Association of Computer Programmers & Analysts
P.O. Box 95
Kensington, Maryland
20795

# INSTRUCTION

*It is not the task or the technology which will sustain either society or the individual in the years ahead, but the quality of the human development of the person.*

— *John Illman, in Educational Equality for the Handicapped, 1974*

## ACCOMMODATIONS IN THE CLASSROOM

From the teacher's point of view, handicapped students have three kinds of calssroom needs: those common among students in general; those that call for care in lecturing and leading discussions; and those that require special arrangements. Teachers as a rule can meet the first two categories of needs simply by following practices generally recognized to contribute to good teaching. The third category of needs, special arrangements, requires that teachers display flexibility and leadership; the handicapped students bear most of the everyday responsibility for making teachers aware of their special needs and for assisting in finding potential solutions.

Classroom accommodations for handicapped students tend to be highly individualized. Usually the students themselves are excellent sources of information on their needs because they have learned what works best for them. It is the student's responsibility, therefore, to initiate with the teacher a frank discussion of how to meet special needs in the most practical way. Such discussion is best held before the semester begins to allow time for teacher and student to learn each other's requirements and make the necessary arrangements.

Some handicapped students may hesitate to initiate a presemester discussion with the teacher. Here, the teacher can help by being alert to the needs of students and initiating a discussion when it seems called for. Other teachers and counselors can help by letting the teacher know of students with special needs who will be entering the class. Also, handicapped students might be encouraged to preregister so that the information can be given to the department chairman or other responsible individual in timely fashion. To repeat, it is essential that adequate time be allowed for planning before the semester begins.

It is important that the handicapped student be personally involved in discussions of special arrangements. Teachers uncertain of what to do might bypass the student and consult other teachers or advisers. The result of such a procedure is explained by a handicapped person who earned a doctorate and is now a practicing research chemist: "I was constantly frustrated in my attempts to arrange presemester conferences by teachers who said that they had 'already spoken to so-and-so and everything was arranged.' This left me completely in the dark about what had been arranged and unable to express my views on what needed to be arranged."

### Common Needs

Teachers tend to have different classroom styles, and students have different styles as well. When styles mesh poorly, the student's work may suffer. The teacher normally takes the lead in correcting matters, and this principle applies to the handicapped student as much as to any other.

Any class may include students too shy to speak up or ask questions easily; shyness in the handicapped may be compounded for various reasons. With deaf students, for example, hesitancy to speak up may be related to prior ridicule of the way their voices sound or fear that they will be unable to understand the teacher's reply. The teacher can help by involving the student at appropraite times. In any event, it is good teaching technique to encourage all students to participate actively in calss. The practice benefits students and helps teachers monitor their progress.

Many students like to review subject matter before it is taught in lecture or recitation sessions. Thus it is helpful to make syllabi and other course materials accessible to all students as far in advance as possible; it is especially helpful to handicapped students who may prefer to rely particularly on advance preparation and organization. In the same vein, timely explanation of course requirements and objectives is extremely helpful to handicapped and able-bodied students alike.

### Lecture/Discussion Techniques

Teachers who are careful about their techniques in lecturing and leading discussions are likely to be helping all of their students, but good technique is particularly valuable to handicapped students. The governing principle is to speak and gesture as clearly and specifically as possible. Beyond that, the utility of various elements of good technique depends on whether the student is totally blind or deaf or has partial signt or hearing. Orthopedic handicaps usually do not require special awareness of classroom communication techniques.

It is natural to call on students by pointing, but the blind student obviously must be referred to by name as well. The practice is sound for any student. Similarly, the teacher can help students with impaired vision by referring to material on the blackboard by name. For example, one would say "benzene," not "this compound;" one would say "from 20 degrees Celsius to 40 degrees Celsius," not "from this temperature to that." Blind students have their own ways of learning from graphics--the use of raised-line drawings is one such method. Still, the student can learn from graphics presented in class if the material is described carefully. Such material is best described in consistent fashion-for example, closkwise or left to right. Blind students may also find it useful to have access to molecular models of structures discussed in lectures.

Students who are deaf or have impaired hearing need to be called on by first ensuring that there is appropriate eye contact. Speaking the student's name at the same time can help the teacner keep other students involved. Teachers can help also by remembering to keep their faces fully visible to the class when speaking. The deaf student who is speechreading (lipreading) or watching an oral or sign language interpreter cannot take notes properly, read written material, or watch a demonstration.

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Source: Reese, K.M. (Ed.). Teaching Chemistry to Physically Handicapped Students. Washington, D.C.: American Chemical Society, 1981, pp.3-6, 21-2.
Available from: American Chemical Society, Committee on the Handicapped, 1155 16th Street, N.W., Washington, D.C. 20036, Phone 202/872-4600.

Without an interpreter, neither deaf nor hard-of-hearing students can follow what other students are saying if remarks come from the back of the classroom. The teacher can help in several ways: by passing out printed material before class; by inserting appropriate pauses during demonstrations; by repeating questions asked by students; and by summarizing classroom discussion on the blackboard at logical points. These practices can be useful to all students. Because many scientific terms do not have signs, deaf students can benefit from seeing new terminology on the blackboard or on overhead transparencies. In discussion sessions, the teacher can help to keep the deaf student abreast by controlling the pace of the discussion. Allowing only one student to speak at a time, again, can benefit the entire group.

While the foregoing accommodations may sound complicated to a teacher who has never considered them before, they are, in fact, not difficult procedures.

Special Arrangements

Special classroom arrangements for handicapped students can be worked out by teacher and student; as noted earlier, such arrangements are best made before the semester begins. Seating plans, for example, are important to students with hearing, visual, and orthopedic handicaps. Some students may need notetakers or classmates who are willing to share their notes; they may wish to have photocopies or carbon copies of sets of notes taken by several students to compensate for individual habits in notetaking. Other students may need oral or sign-language interpreters or may ask permission to tape lectures.

In meeting these special classroom needs, it is the handicapped student's responsibility to arrange for some of the required services; the situation varies from state to state. Such services might include the transcription of tapes for deaf students or the conversion of printed course materials into braille, large print, or tape and the conversion of diagrams and graphics into raised-line form for blind or visually-impaired students. (Recordings for the Blind converts printed text materials free, and loans the recordings to blind persons.) Many schools have an office that provides and coordinates such services for handicapped students, and many state vocational rehabilitation agencies usually pay for support services. Teachers can help in several ways. They can help find volunteers to take or share notes. They might agree to make their own notes available to the class as a whole or offer to allow their lectures to be taped subject to an agreement that the tapes are for personal use only. And in general, teachers can take the lead in creating an accommodating and receptive atmosphere in the classroom. In this vein, teaching assistants, where available, can be helpful, in part because handicapped students may consider them more approachable than the teacher.

Testing and Evaluation

Administration of tests to handicapped students may require a degree of accommodation by the teacher. Experienced students who cannot take written examinations in the usual manner will have worked out an effective alternative. The inexperienced student may need to settle on a mutually satisfactory method with the teacher. Arranging for special equipment or assistance is the student's responsibility.

Special conditions may make it necessary to test handicapped students orally or with the assistance of a reader/writer. However, handicapped and able-bodied students often can take tests at the same time and place by using measures that include:

- Putting tests and/or answers on tape or in braille
- Use of a facial mask to shield the sound of putting answers on tape
- Use of talking calculators with an earplug
- Use of the Optacon (optical to tactile converter--scans written material)
- Use of typewriters or writing guide

Various contingencies must be planned for. Some visually handicapped students, for example, may need paper of nonstandard size for tests. Local societies for the blind often will convert tests into braille, but may take one or two weeks to do so. Also, because the language of chemistry is not purely descriptive, care must be taken to see that it is converted into braille accurately and completely. Here, a graduate student or advanced undergraduate can help by checking the translation with the aid of a blind person ahead of time.

Students who became deaf before they learned to speak may sometimes have difficulty expressing themselves with proper sentence structure. This is largely due to the difficulty of learning to read and write a language they've never heard; English is like a foreign language for some deaf students. In grading tests, therefore, care must be taken to distinguish the student's grasp of the subject matter from handicap-related writing deficiencies. Deaf students may not follow all of the postexamination discussion in class; the teacher can provide helpful feedback by taking extra care with comments written on the student's examination paper.

Students who use special methods to take tests may need extra time. The amount of extra time that can reasonably be permitted must be determined by the teacher. The circumstances will vary from student to student and method to method, and teachers encountering the situation for the first time may wish to consult the student's previous teachers or colleagues with pertinent experience. The most important person to consult is the student, who is the best source of information on how he can demonstrate his knowledge of the course most effectively. This is the time when a frank discussion between teacher and student can be extremely important.

The critical need in testing and otherwise evaluating handiapped students is to ensure that their performance is measured on the same scale as the performance of other students. Special methods and time allowances, where permitted, must be handled so that the student is evaluated under circumstances that, except for the disability, are fully equivalent to those imposed on other students.

* * *

## TEACHING STRATEGIES AND ADAPTATIONS--MOBILITY IMPAIRED

Adaptations for mobility impaired students are directed almost exclusively to the laboratory setting. The science classroom situation calls for few modifications which are not otherwise adopted in the nonscience classroom. Notetakers and devices such as mechanical page turners are useful. During a demonstration in the laboratory or classroom, a pivoting mirror should be installed over the demonstration table so that mobility impaired students can remain seated or at their stations and still see what is taking place.

Within the laboratory there should be lowered, recessed workbenches to accommodate wheelchairs. Otherwise, work stations permit only "parallel parking" of wheelchairs. One alternative in certain laboratory situations, though a temporary solution, is a lap board which fits across the knees. Outside the laboratory, the lap board provides students with ready access to items used in the classroom. One of the best ways to accommodate students with mobility and/or upper extremity impairments is to pair them with a partner in the laboratory. For the laboratory the following physical accommodations are recommended to ensure accessibility:

- aisles wide enough for wheelchairs and crutches
- floor surfaces nonskid
- faucets, outlets, and gas and water controls installed at the front and sides of work areas rather than at the rear
- batwing controls on all facilities (require minimal dexterity)
- gooseneck spigots (allow extra space within the sink)

Again, such modifications generally are minimal and increase laboratory accessibility and safety for all students. Blueprints for construction of adaptive laboratories have been developed by the University of California, Davis, and adaptive laboratory benches and equipment are available commercially from companies such as Conco Industries in Westhaven, Connecticut.

There are numerous adaptations which make computers accessible to students with severe limitations of the upper extremities. If one reliable movement can be determined, then a system which accommodates that movement can be devised to activate the computer. The terminal can be activated by breath, voice, or accessible switch. These devices operate by coursing across a field of instruction possibilities which are visible on a split screen when the device is activated by continuous pressure, breath, or voice. A command is entered into the computer when the activating mode is stopped, started, or changed, depending on the system.

Modifications can be made to ensure accessibility to computers for virtually any mobility impaired student. For those students with some free movement, the breath stick has been successfully used on a full keyboard modified to respond to that method of activation; a mouth stick can be used without any modification necessary to the keyboard. For some students a wrist rest may be enough to enable their use of an unmodified keyboard.

New methods for access to computers are being developed. For instance, the University of California's Irvine and Berkeley campuses are jointly working on a method of single-key entry. Currently students must do more than one manual action and single-key entry will eliminate the need for numerous motions, making computers more accessible for disabled students. Also under development are programs for computer-assisted learning which hold great promise for the participation of mobility impaired students in the laboratory. Such organizations as the Education Technology Center at the University of California, Irvine, the Lawrence Hall of Science at the University of California, Berkeley, and the PLATO project at the University of Illinois are developing the kinds of programs which may allow disabled students to perform entire scientific experiments on the computer. The University of Illinois' PLATO project has designed such complicated experiments as titrations to be executed entirely on the computer screen. Although such programs are not widely available, their continued development will mean that those students who have had to rely on a laboratory partner may be able to go through the actual trial and error of experimentation themselves.

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Source: Simpson, S. Careers in Science: A guide for the Counselors, Teachers, and Parents of Students with Disabilities. University of California, Irvine: Career Planning and Placement Center, 1981, pp.16-7. Available from: University of California, Irvine, Career Planning and Placement Center, Irvine, CA 92717.

Supported by funds from the National Science Foundation, this guide presents information on career counseling, attitudes, career awareness, adaptive devices, teaching strategies, and the legal rights of the disabled in an effort to encourage disabled students to participate in science careers. The primary focus is on hearing, mobility, and visual impairments, but many of the ideas are applicable to other handicaps. Includes profiles and comments of successful handicapped scientists.

## ELIMINATING EQUIPMENT AND WORK ENVIRONMENT BARRIERS

*1. Is Normal Hand or Arm Strength or Reach Required?*

Every vocational field includes tasks that require the student to grasp and operate controls or to reach, position, and use tools and materials. Any number of orthopedic and neuromuscular conditions may sufficiently impair strength and reach as to make this difficult. Some common problems and solutions pertaining to restricted reach, to weakness, or both are described here.

*Work station layout puts tool or supply areas out of reach.*

- Provide a tool that the student can use to gather in items. Useful tools include: surgical forceps for grasping paper, small manuals, and sheets of plastic, pliers, too, can give a couple of inches of extra reach; grocers hooks for reaching light items on high shelves; and croupier sticks for drawing in tools, bolts, electrical components and other items loose on the work surface. Many of these solutions are also helpful to the student who has trouble picking up small objects because of poor finger coordination.
- Reorganize tool and supply areas at the work station without making any physical modifications. Place those objects which, because of size, shape, or weight, are most difficult for the student to reach on shelves or in trays closest to the student.
- Put items into trays that are easy for the student to pull in and push back. This may involve the installation of trays where there were none, or the modification of existing trays to make handles easier to grasp, for example, by replacing small knobs with larger ones.
- Install or relocate shelves and cabinets to place items within reach. This may include storage space for supplies or tools that are not normally stored at work stations, but which it is unreasonably time-consuming for the handicapped student to fetch from central locations.
- Put small items on a lazy Susan that the student can turn to bring objects within reach. (Lazy Susan bearings are inexpensive and can be ordered through most suppliers of shop equipment.)

*Equipment controls are positioned where they are difficult to reach.*

- Consider this problem when ordering new equipment. Favor those radial saws, stoves, and other pieces of equipment with front mounted or otherwise easily reached controls.
- Provide the student with an implement with which to reach controls. The type of implement required varies greatly depending on the type of control. For one person, a simple stick may do to push buttons or to press levers, rings, or handles.
- Extend, reorient, or otherwise modify levers; for example, a tube may be slipped over the carriage return of a standard typewriter. Other possibilities are extending each arm on a four-star handle and reorienting a drill press handle for use by a seated person.
- Mount the equipment so that it can be approached from all sides where controls are present. For example, move a drill stand with side controls from the center of a bench to the corner.

*Hand tools or hand-held implements require excessive strength to use.*

- Provide the student with a manually operated tool that supplies more mechanical advantage than is usually necessary. For example, if a student cannot apply enough force using a standard screwdriver, or short spanner wrench, then try an offset, or spiral screwdriver, or a socket set with a long handled wrench. Another example: provide a power lever arm for a stapler.
- Provide a power tool. For example, an electric stapler eliminates the need for downward pressure entirely. Similarly, electric scissors greatly reduce the need for hand strength.

*The student's hands must be held above the work area which is fatiguing for the weak.*

- Purchase or construct a stand to support the student's arms. A padded board or other very simple support is often enough. Mobile supports that pivot and dip in response to the students movements are available for many uses, and special supports can be designed when stock items do not exist--select them in cooperation with a rehabilitation professional.
- Select a tool or utensil, such as a flat-bottomed measuring spoon or an offset screwdriver, that does not require the hand to be held up to use the item.
- Rearrange the work area so that the student does not have to reach over one item to get to another.
- Select equipment with surface mounted controls. For example, stoves with controls on the top are superior to those with controls on the back panel.

*2. Is Normal Upper Limb Dexterity or Steadiness Required?*

Timer, knobs, buttons, switches, and other controls that must be pushed, pulled, twisted, or squeezed may prove difficult to grasp or manipulate. Also troublesome can be small diameter tools such as mixing spoons, pencils, or probes that require fine finger motions to pick up, and rulers, t-squares, and other implements that have no easily grasped protruding parts. Some common problems and solutions are:

*A knob must be twisted, but is difficult to grasp.*

- Attach a lever to the knob that can be pushed with a mouthstick, a prosthesis, or a gross movement of the hand.
- Enlarge the knob with a temporary spoked handle that can be operated with a prosthesis or gross movement.
- Replace on-off knobs with toggle switches and adjusting knobs with slide adjustment mechanisms. Be sure that toggles and slides are large enough to grasp and pull easily.

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Source: Dahl, P.R., Appleby, J.A., and Lipe, D. Mainstreaming Guidebook for Vocational Educators: Teaching the Handicapped. American Institutes for Research in the Behavioral Sciences. Salt Lake City, Utah: Olympus Publishing Co., 1978; pp. 179-206.
Available From: Olympus Publishing Company, 1670 East 13th St., Salt Lake City, Utah 84105.

*A small diameter tool or small part is difficult to grasp.*
- Put rubber tubing around the tool handle to increase the diameter. Alternately wind masking or electrical tape around the tool.
- Construct a holder for the tool.
- Select a standard tool or utensil with a large handle.
- Provide a tool such as a nail-holder or a "grab all tool." The wires at the end of a grab-all tool come together to grasp an object as a plunger on the top is released, in much the same way as extended fingers close around an object. This is especially handy for grasping wires or other small items that are in out-of-the-way places and must be drawn toward the student.

*Control buttons are small or close together making it difficult for a poorly coordinated person to strike the desired control.*
- Consider this problem when purchasing new equipment. Many items, such as tape recorders, differ greatly in the location and operating characteristics of controls.
- Build or buy a template to give the student a "path" between closely spaced controls. This is a particularly good strategy when controls operate in response to a light touch.
- Install lever extensions over the controls so that less dexterity is needed to activate the controls.

*A t-square, ruler, or other flat item is difficult to grasp or to push across the work surface.*
- Provide the student with a rubber finger pad, such as are used by bank tellers for counting bills, to give a better grip with finger tips.
- Drill a hole in the object so that it can be pushed and pulled.
- Attach a handle to the object so that it can be pushed and pulled.
- Select a standard piece of equipment with ridges or other surface features that make it easy to push or pull.

*A telephone must be used on the job for which the student is training, but the student has trouble lifting the receiver or dialing.*
- Call the telephone company for information about "card dialers" that automatically dial numbers from pre-punched cards, "speaker phones" that allow numbers to be dialed and calls to be received without lifting the receiver, "headset jacks" that connect to standard telephones and allow lighweight headsets to be worn by the user.
- Try a pushbutton model as many find it easier to push buttons than to turn dials. Obtain an extension arm to hold the handset near the user's ear.

3. *Are Two Hands Required?*
*One hand is needed to brace an object while the other hand does the work.*
- Provide a device to hold the tool if a light object that is not possible (or desirable) to clamp down is to be worked. Examples: hold a file in a vise and clamp a sanding block to a workbench for fine finishing; attach a clipboard to a workbench to hold paper for making computations; build a simple stand to hold a tool or utensil.
- Provide a device to hold the object being worked on. For example, fasten a "bench hook" to the workbench to provide a backstop, or attach a protruding prong to a cutting board to impale tomatoes, and other vegetables while they are being peeled or sliced.
- Select an auxiliary piece of equipment to allow the device to be held with another part of the body or not to be held at all, for example, attach a telephone rest to a receiver so that the latter can be held against the ear with the shoulder, or an extension arm to hold the receiver. Eliminate the need to hold things by providing non-skid work surfaces, such as rubber mats, to keep light objects from "running away" under light pressure. Alternately, apply a non-skid material to the underside of the objects.
- Select a piece of standard equipment that requires only one hand--for example, an automatic center punch, an electric pencil sharpener, a magnetic brad pusher, some models of electric can openers, or tongs.

*Machine operation requires two hands.*
- Provide clamps to hold stock in cases where they are usually not necessary. For example, one-handers can use drill press clamps to hold stock in position. Similarly, boards can be clamped to the bench for sanding.
- Consider the mechanical efficiency with which pressure may be applied with one hand when selecting hand-held power tools. For example, if the student must apply pressure when operating the tool, then choose a model that allows one-handed pressure on the tool that matches as closely as possible the direction in which the pressure is to be applied from the tool to the stock.
- Select machines that do not require the manipulation of the bulky stock when the machine is in operation. For example, radial saws allow wood to be clamped to the table and the blade drawn through the wood by pulling or pushing a single control, whereas two hands are sometimes needed to guide large pieces through table saws. Similarly, a hand-held scroll saw may be used to cut large clamped-down pieces of wood which could not be controlled on the table of a standard scroll saw with a single hand.

4. *Must Manuals, Instruction Books, or Diagrams Be Referred to Frequently?*
Students who are weak, who have limited reach, or who have serious incoordination of the hands, fingers, or arms may be slowed down in their work if they must make frequent reference to manuals or diagrams because of the physical difficulty of manipulating such items. Possible solutions:
- Post enlarged copies of diagrams or the most frequently referred to pages of manuals near the student's work station.
- Take pages out of a loose-leaf manual and post them around the work station.

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## ACCOMMODATION OF A WHEELCHAIR BOUND STUDENT IN A TYPICAL FRESHMAN PHYSICS LABORATORY

Ronald M. Frinks and David M. McNamara
Hudson Valley Community College

The first time an instructor learns that a handicapped student will be attending his class may trigger initial reactions of apprehension, uneasiness, and self-doubt. Many questions flash through the instructor's mind. What should I do? Where should I go for help (colleagues, literature, etc.)? What has been done in the past in this same (specific) situation? What are the student's limitations, restrictions; what are his capabilities? How do I accommodate this student in my course? Why me, why not someone else?--I have no training for this.

When informed that a handicapped student will be attending one of your classes, a good place to begin is to arrange to meet the student before instruction begins. The objectives of this meeting should be to: (1) begin to build a rapport with the student, (2) learn what the student can and CANNOT do, and (3) determine any special equipment (e.g. shorter air track) or modifications that may be required. Items two and three are crucial because of the highly individualistic nature of the handicaps. Wheelchair bound students for instance will differ from one another in: mobility, skill in maneuvering, ranges of horizontal and vertical reach, dimensions of wheelchair, etc.

The education of a handicapped student (contrary to instructor first perceptions) is not totally and solely the responsibility of the teacher. Instead it is a shared responsibility; the teacher and the student must work together. It is incumbent upon the student to describe his limitations to the teacher. Then the student and teacher must work as a team to devise an instructional plan that will be effective.

The prime considerations of our instructional plans were: (1) instructional value, (2) safety, and (3) accessibility. We agreed at the outset that we would not have the handicapped student engage in any activity of meager instructional value just because he was able to do it.

The safety component of our instructional plans necessitated removing the possibliity of spilled boiling water and flying broken glass at face level by acquiring a table of a more appropriate height. Dangling electrical leads were avoided by plugging into an AC panel of DC binding posts fed by leads sufficiently long to rest on the floor. Blocked aisles were avoided to reduce congestion, commotion, and consequently greater risk of accidents: also so as not to restrict fire exit routes. Goggles were required to protect a person whose eye level was more approximately the same as a laser beam.

Accessibility meant that the handicapped student should be able to reach, manipulate the apparatus, and to see to take accurate instumental readings. To do these acts he had to be able to move about the laboratory. Consequently, floor plans (where to locate the handicapped table), obstacles, traffic flow, room to maneuver (no sharp turns), congestion, commotion, student's range of horizontal and vertical reach, etc., all had to be considered. Wall barometers had to be lowered; mercury thermometers had to be positioned nearer than normal to the edge of the lab table.

Two problems that have not yet been addressed are instructor load, and a philosophy of the role of the handicapped student's lab partner. Suppose a normal lab section is 16 students. A lab section of 15 students plus one handicapped student represents an increase in teacher load (even though the total number of students and therefore the student/teacher ratio has not changed). Not only must the teacher arrange and participate in pre-instructional meeting(s), design additional often innovative instructional teaching strategies, oversee the ordering of new equipment and the modification of existing apparatus, but he/she must also spend more time and give more individual attention to the handicapped student during scheduled lab hours. Without a reduction in student/teacher ratio, or some other form of reduction in load, this additional time, attention, and energy given to the handicapped student can only be taken away from what would normally be available to the non-handicapped students...

EXPERIMENT 1 & 2: Linear & Rotational Kinematics

- lower support clamps
- side clamps vs holes in table top for support rods.
- pointer/periscope/partner for reading meter stick (MS)
- at own table: (1) masses, (2) MS with caliper jaws, (3) clock with remote cord.

(Note: an additional 40 experiments are presented in original article.)

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Source: Frinks, R.M. and McNamara, D.B. "Accommodation of a Wheelchair Bound Student in a Typical Freshman Physics Laboratory." Physics Department, Hudson Valley Community College, Troy, New York 12180. Excerpt from original article reprinted with permission of the authors.
Also available in: Insight 1982: An Annual Collection of Articles on Teaching and Learning by Faculty of the Community Colleges of the State University of New York. 5th Anniversary Edition, 1981-1982. (Available from Office of Community Colleges, State University of New York, University Plaza, Albany, New York 12246.)

This article offers a general introduction to the problem of accommodating a mobility impaired student in a freshman Physics lab. Recommendations for adapting 42 of the most common freshman Physics lab experiments are presented. The authors are available to present a 35 mm slide and talk show featureing their experiences with a wheelchair bound student in the Physics lab. This presentation focuses on details of redesign of lab furniture, modification of lab apparatus, adaptation in how an experiment is performed, and special problems of safety, mobility, accessibility, instructor load, etc.

## IN THE LABORATORY

Certain general considerations apply to all handicapped students entering a laboratory course. It is important, for example, to involve the laboratory assistant from the beginning. The teacher can do this by scheduling a conference with the assistant and the student before lab work begins and by seeing to it thereafter that the two remain in regular contact. Not all schools or departments have teaching assistants, so their role in accommodating the handicapped student has to be assumed by the teacher or perhaps by a well-qualified student. It is customary in some lab courses to pair students as partners. In this case it is important to help the handicapped student locate a congenial lab partner or group and to check occasionally to be sure everything is well.

If a student needs extra time to complete a lab assignment, the teacher should try to be flexible. Extra time might be available in a Saturday section, or a student might enter an additional lab section during the week or start early or stay late in the regular section. Scheduling extra time may be more difficult in small schools or departments with relatively few lab sections. In any event, it is best that student and teacher agree on the amount of extra time that is reasonable so that time does not become an issue when the student's work is evaluated.

Some physical modifications in the lab might be necessary. Whatever modifications are desired may require ingenuity on the part of the small school or department with limited financial resources.

The student with impaired mobility needs to have easy-access to equipment, materials, safety devices and other services, and exits. The student also needs enough aisle space to permit lateral movement and maneuverability. Positioning a wheelchair parallel to the lab bench is generally restrictive, although some students might prefer it.

The basic requirements for a laboratory work station for a student in a wheelchair are:

- Work surface 30 inches from the floor
- 29-inch clearance beneath the top to a depth of at least 20 inches and a minimum width of 36 inches to allow leg space for the seated individual
- Clear aisle width sufficient to maneuver a wheelchair---recommended aisle width is 42-48 inches.

Should the aisles be too narrow, a lab station can be set up at the end of the bench or a portable station can be designed or purchased and positioned as desired. Another alternative, if the student can transfer from the wheelchair, is to design a more maneuverable chair for use in the lab only. Two such designs that have worked well are:

- An ordinary armless chair secured to a platform that moves on casters. To move, the rider pushes against the floor with rubbertipped canes.
- An adjustable-height wheelchair made from an old office chair, a set of wheelchair wheels, and a hydraulic truck jack with a 6-inch lift.

Compared to a wheelchair, these homemade designs permit good mobility around the lab, increased mobility at the bench, and increased accessibility to the bench top. Supplies and equipment can be moved around the lab on the chair-and-platform device, which provides a flat, steady surface. The adjustable-height wheelchair may include a tray that can be snapped onto the chair's arms to carry equipment such as flasks and crucibles, leaving both hands free to operate the chair. Mobility and accessibility at the bench can also be enhanced by constructing a platform to raise the student to a height more compatible with the height of the bench top and by modifications to the bench itself, such as pull-out shelves.

The laboratory as a whole can be made more accessible to students with impaired mobility by making various modifications:

- Adjustable-height storage units and special-equipment work spaces
- Pull-out or drop-leaf shelves or counter tops for auxiliary use---for example, shelves at lap-board height for holding instruments to be used by students in wheelchairs
- Single-action lever controls or blade-type handles rather than knobs for students with impaired manual dexterity
- Flexible connections to electrical, water, and gas lines for students with limited reach (i.e., in a wheelchair)
- Alternate means of storage, such as a portable lazy susan or a storage cabinet on castors

Students whose handicaps affect the use of both upper and lower limbs will need a full-time assistant to perform experiments under the student's direction; the student should be able to observe the data acquisition as well as direct the experiment.

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Source: Reese, K.M. (Ed.). Teaching Chemistry to Physically Handicapped Students. Washington, D.C.: American Chemical Society, 1981; pp.9-13.
Available from: American Chemical Society, Committee on the Handicapped, 1155 16th Street, N.W., Washington, D.C. 20036. Phone: 202/872-4600.

This 42 page manual gives specific information about teaching chemistry in the classroom, in the lab, as well as discussing lab safety and methods of testing and evaluating student progress. Information and adaptations are equally pertinent to teaching other lab sciences.

## NOTETAKERS FOR PHYSICALLY DISABLED STUDENTS

For physically disabled students and workers, the use of notetakers in school or work is a valuable, sometimes essential, practice. If you are going to pay for notetaking, you don't want to hire "just anybody" in your class or office to take them. Some people have the skill to capture the essence of what is said, and organize it in a logical fashion. Others will jot down fragments of ideas that will not make sense to you when you try to use the notes. To obtain a good notetaker, here are some guidelines to follow:

1. Interview prospective notetakers to find out their general qualifications and experience. If they are inexperienced, are they willing to sit for several hours taking down material? Do they have any personal interest in the courses you plan to take or the work you do? Notetakers who are interested in the content tend to take better notes.
2. Outline exactly how you want your notes to be handled. Do this by preparing a list or statement of your general criteria and verbally instruct the notetaker. What are their attitudes toward your verbal instructions?
3. Next, test their abilities by asking them to take notes while you deliver ten or fifteen minute talks on anything you wish. See whether they have captured the important points and outlined them clearly and logically. Their attitudes towards this test may also give you important information about the attitude they will have about taking notes for you later on.
4. Assess dependability. Whether you are hiring a student, colleague, or someone else as notetaker, find out about the person's attendance, punctuality, and reliability through the "grapevine" of other students, professors, or colleagues. If any records are available to you, check them too.
5. Check their handwriting. If it is not legible, find out whether they will type their notes for the same fee.
6. Make sure you know exactly what you want. Know how many hours a week you plan to use a notetaker. Will you wish notes taken in the evenings or on Saturdays as well as during weekdays? Find out about their schedule and flexibility.
7. Make sure you discuss the rate of pay if you are responsible for paying the person. If the person is paid by the school or some other agency, make sure you turn in the hours promptly if that is your responsibility.

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Source: Hiring and Supervising Personal Service Providers: A Guide. Falls Church, Virginia: Institute for Information Studies, 1980, p. 16. Available from: National Rehabilitation Information Center, 8th & Varnum Street, N.E., Catholic University of America, Washington, D.C. 20064.

An excellent "how-to" book for disabled people who require the services of attendants, notetakers or drivers in order to live independently. Funding sources, independent living centers, rehabilitation programs and other agencies are listed as resources.

## THE EMOTIONALLY TROUBLED PERSON IN THE CLASSROOM--WHAT CAN A TEACHER DO?

In our classroom, on the job, or in our homes, we expect those around us to behave in ways which suit the situation. When someone deviates from our expectations of normal behavior, we often become a bit tense, anxious and possibly a little afraid or angry. In many of these situations we may not be fully aware that others' actions affect us in that way. We may not realize that, for instance, we are irritated with our student Joe because *he* is always a few minutes late, and *we* are always a little early for our appointments. Alternatively, a co-worker may eat french fries with his or her hands, instead of with a fork as we had been taught to do. We may develop a slowly increasing irritation with this person as the meal progresses, and may never realize why. As teachers who are likely to encounter students either developing emotional difficulties, newly returned from therapy or currently undergoing treatment for emotional problems, we cannot afford to let ourselves get agitated for reasons which escape our awareness. Thus, before examining some approaches to interacting with emotionally troubled (and troubling) students in the classroom, we should take the time to examine ourselves in regard to the following issues:

1. *What do I expect from my students in terms of:*
   a. *promptness?*
   b. *attendance?*
   c. *personal appearance?*
   d. *responding in class?*
   e. *interacting with others in class?*
   f. *completing assignments?*
   g. *relating to me as their teacher?*
   h. *any other issue pertinent to my own situation?*

2. *How much deviation will I allow in any of my students' attendance, promptness, appearnace, classroom behavior; and course work before I become upset? How can I tell if I'm getting upset? How could I increase my awareness of how others' actions affect me?*

3. *What will I do if a student's behavior deviates beyond my tolerance level in regard to:*
   a. *attendance?*
   b. *promptness?*
   c. *appearance?*
   d. *classroom behavior?*
   e. *class work?*
   f. *any other issue of importance to me as a teacher?*

4. *What will I do if my first response to the student's behavior doesn't either alleviate my upset and/or alter the student's behavior? What possible responses could the student have to my actions? (Possible responses include, among others, feeling resentful, childish, ridiculed, alienated, unconcerned, or angry; feeling respected, helped, wanted, or cared for.)*

Now, if you have taken some time to reflect on your expectations as a teacher, your tolerance level for deviations from these expectations, and your usual responses to students whose behavior exceeds your tolerance level, ask yourself "Am I expecting too much? Am I expecting too little? Do I get easily upset by events which do not meet my expectations? Do I find that I seem to get upset a lot by certain students, or certain types of students? Why? Do I overlook too much? Am I known as an easy teacher (as opposed to good teacher)? Do I respond in the same fashion to each student who gets me upset? Do I get results? Are there any other approaches that might help me deal more effectively with students whose actions bother me? Am I too rigid? Is my tolerance level too low? Am I too loose in tolerating various actions in class? Do I let my students 'get away with murder?'"

*It is important for you to examine your expectations, tolerance for deviances, and response patterns when such deviations occur, because students who have had emotional problems may not function at a level equal to that of someone who is considered "normal" or in good mental health.* He or she may still be receiving treatment (on an out-patient basis, for example) and may have attained the best level of functioning of which he or she is capable at the present time. Because a person who is "in good remission" from serious emotional difficulties has probably had dysfunctions in his or her thought processes, perceptions, emotional states, and motor activity, residual quirks of no great consequence may be present. These quirks, if any, may take the form of mannerisms or nervous habits. They may manifest themselves in the form of social ineptitude -- not really knowing the subtleties of interpersonal relations such as when it's acceptable to interrupt a conversation and when it isn't, when it's o.k. to be exuberent or when it isn't, or when it's necessary to speak out as oppossed to waiting in silence. *How you respond depends in part on your awareness of what behavior you expect, what you will tolerate, and what you do when someone's actions exceed your tolerance level.*

Even if a student (or a colleague) with a recent history of emotional difficulties has no idiosyncrasies, he or she may be quite normally insecure and anxious about (a) how well he or she will fit in; (b) how well he or she can do in school, especially on tests; and (c) how well he or she will get along with the teachers. Interpersonal realtionships can be a two-fold source of tension for a newly recovered psychiatric client because (a) frequently, his or her difficulties were manifest most prominently in relations with family, friends, co-workers, or neighbors, and (b) he or she has learned that it is often unwise to tell people about having

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Source: Gugerty, John J. It's About Time Emotional Disturbance Came Out In the Open. University of Wisconsin, Madison: Wisconsin Vocational Studies Center, 1977, pp.22-7.
Available from: Wisconsin Vocational Studies Center, University of Wisconsin, Madison, 964 Educational Sciences Building, 1025 W. Johnson Street, Madison, Wisconsin 53706.

been treated for emotional problems. Thus, the issues of fitting in, being accepted, making friends, and being honest about one's past experiences can evoke a fair amount of very normal anxiety in a newly recovered person.

Authority issues may also enter the picture. A person who has recently completed therapy may become very dependent on the teacher for direction and approval. But in some cases, the teacher may evoke some resentment and hostility as an authority figure. In either case, the instructor's response can aggravate or ease the problem. Medication prescribed for the psychiatric problem may induce side effects such as sleepiness, or shakey hands, to name a few.

A more subtle problem could arise in relating to a student who confides to you that he or she is seeing a psychiatrist, psychologist, social worker, or other therapist and then proceeds to downgrade the therapist's efforts or attribute his or her classroom troubles to the "stupid shrink." While you listen with attention and empathy try not to undercut the therapist's efforts. If you realize that you are being enmeshed in such a situation, limit your focus to the classroom and problems that you and the student can work on in that context.

Unfortunately, not every student you instruct will have a handle on his or her emotional problems. You may encounter a student whose emotional stability may be weakening, whose hold on reality may be slipping, or whose overall functioning may be deteriorating noticeably. What should you do? A sensible approach consists of the following four steps:

A. OBSERVE
B. LISTEN
C. CONFER
D. REFER

*Observe.* Pay attention to how the student acts. What is being done differently? What isn't being done that formerly was part of the person's usual pattern of behavior?

*Listen.* If you feel the student's classroom performance is slipping, you can, in keeping with your role as a teacher, hold a conference with the person. Then pay attention to what the person says, or fails to say if warranted by the situation. Don't do all the talking. Give the person a chance to think, to respond to your statements. Reflect for a minute. If you yourself were having troubles, how easy would it be to tell them to your supervisor? How bad would it have to get? How scared would you be? How hesitant? Chances are you would be scared, hesitant, relutant, and fearful, so there is no reason to think a student will rush up to you with a well-organized speech about his or her difficulties. Allow the person a chance to express what's inside. A thirty second silence on your part is really a very short time, but it can seem like an eternity. Even so, judicious pauses in a student-teacher conference can be very productive.

*Confer.* Don't be too afraid, or too proud, to seek out the opinions of your colleagues whether fellow teachers, counselors, psychologists on staff, or whomever you respect and have confidence in. You should protect student confidences in seeking others' views. Keep in mind though, that asking co-workers for advice or suggestions will be much less productive if you haven't observed the details of the student's situation nor taken the time to listen to the student's perspective. But seeking help in regard to alternative courses of action may "go against the grain." You may have been teaching a long time, and handled many difficult situations. But asking for another opinion isn't demeaning, nor does it mean you can't handle your own students anymore. (Many doctors ask each others' advice quite regularly, and they most likely do better treatment because of it.) Then too, it can be flattering and a boost to your esteem to help a student over the rough spots, especially if the student initiates the request for help. But before doing so, if you do, ask yourself whether you are helping this person or trying to be his savior. Since you are not a mental health professional, you could unwittingly slide into a problem situation that is more compex and difficult than it looks on the surface. Responding to a troubled student in a warm, accepting, empathic manner is practically always beneficial, but trying to become an "amateur analyst" can lead to a surprising amount of emotional turmoil for both parties. Then too, you don't have to feel guilty about not being someone's "savior" and don't feel bad about getting help if you feel a person's problems are too serious to wait (as in the case of someone who gives indications of suicidal intent).

*Refer.* If, in the course of interacting with a troubled student, it becomes apparent that he or she needs assistance that is beyohd your professional role and training, you might ask the student whether he or she has considered getting help from any other agency and suggest that such assistance be considered. You shouldn't refer people to outside agencies without their knowledge and consent, but it shouldn't be inappropriate to tell the person that he or she might receive better and more complete help from another source. Two cautions are in order here. *First, if you immediately suggest other sources of help without fully listening to the student, you may convey the impression that you really aren't interested in the student, and are just trying to get rid of him. Second, you must be alert to overextending yourself, or implying that you are capable of determining the nature and scope of the student's problem.* Neither a hasty brush-off nor a sentimental overinvolvement is beneficial. Emphatic listening and concern, coupled with a low key presentation of alternatives from which the student could choose, are most always beneficial. Not infrequently, a good listener is all a person needs to regain the will to carry on and a renewed sense of self-esteem.

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## HIDDEN DISABILITIES

What images come to your mind when you think of cancer, epilepsy, diabetes, ostomy, lung disease, kidney failure, hemophilia, or heart attack? People with hidden disabilities appear to be physically nondisabled. Therefore, they are expected to be totally self-sufficient and to compete equally in the labor market. But they are often discriminated against in employment, community, and social activities as soon as their disability "comes out of hiding." They are shunned or pitied out of fear and lack of understanding. In the disabled community, they are sometimes outcasts--not being "disabled enough" to fit into a group of active, assertive persons with disabilities. People with hidden disabilities often seem to be without a place in anyone's world.

WHAT SHOULD YOU DO?

1. Remember that alternative ways of doing things may be equally effective. An ostomy, for example, is not something that detracts from a person, but enables him/her to live a normal, healthy, and productive life.

2. If you think that someone you know has a hidden disability, and you're curious, go ahead and ask appropriate questions (but don't pry--use good judgment). Most people will welcome your interest and will want to answer questions to dispel myths about their disability.

3. If you smoke, be considerate. Smoke that merely bothers some people may actually be hazardous to people with respiratory problems. When around others, ask before you light up.

4. If you know someone has a hidden disability, treat her/him the same as everyone else. Disabled people are in the best position to know what activities they can participate in. Let them make decisions. Don't lower your expectations of what a disabled person can do.

5. There are some specific actions you can take if you're with someone with epilepsy when a seizure occurs, someone with hemophilia when he thinks he's started to bleed, or someone with diabetes who has an insulin reaction. Be informed, not scared.

6. Hidden disabilities are not contagious. There is no reason to avoid disabled people for fear that you'll catch something.

7. Most people with hidden disabilities can be employed in all the same types of jobs as nondisabled people. Insurance rates will not rise as a result of hiring people with disabilities because group policies are based on the company's overall accident rate. When hiring people, give a disabled person the same treatment as all other applicants, keeping in mind your affirmative action regulations.

8. Learn more about hidden disabilities. Invite members of disabled consumer organizations to speak at meetings and send for written information.

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Source: Cornelius, D. Inside Out: Attitudes Toward People With Hidden Disabilities. Washington, D.C.: RRRI-ALLB Publications, 1980, pp. 2-13.
Available from: RRRI-ALLB Publications, George Washington University, 1828 L St., N.W., Suite 704, Washington, D.C. 20036 (202/676-6377).

# *Learning Disabled Students*

Learning disability has come to be the general term for a variety of specific disabilities including minimal brain dysfunction, dyslexia, developmental aphasia, dysgraphia, expressive dysphasia, aural receptive dysphasia, and sequential memory disorder. Another term sometimes used for the learning disabled is "neurologically handicapped." A common misconception among those not familiar with learning disability is that the student with a learning disability is retarded. The learning disabled student is *not* retarded.

The college professor should keep in mind that the learning disabled student's needs center around information processing. Students with learning disabilities have trouble taking information in through the senses and bringing that information accurately to the brain. The information often gets "scrambled." These students may have difficulty with discrimination (perceiving differences in two like sounds, symbols or objects). Because the information does not reach the brain accurately, the brain often does not do a good job of storing the information with the result of poor memory. Thus, it is important that learning disabled students receive and transmit information in a form or modality that works best for them.

Learning disabled students should always be referred to the campus learning center or tutorial center, if one is available. Reading and writing specialists in English departments, in speech communication, or special education may be able to assist. Some ways of assisting the learning disabled student are suggested here for the professor who may not have such resources available.

The student who has difficulty with written symbols can use readers or texts that are recorded verbatim (as does the blind student). In this case, the student should be encouraged to listen *and* read along. The student can be shown how to obtain textbook information in "economical" ways by using chapter summaries, pictures and captions, graphs, tables, bold type, italics, tables of contents, paragraph and unit headings, indexes, glossaries.

Some learning disabled students are unable to communicate effectively through printing or cursive writing (dysgraphia). This condition may manifest itself in written work that appears careless. For such students oral examinations and reports are more valid evaluations of what has been learned. Some of these students may be able to use the typewriter for written communication; many can't. Another solution is for a student aide to take dictation from the learning disabled student.

Other learning disabled students, for all practical purposes, will be "lecture deaf" (aural receptive dysphasia). Many of the adapted techniques that assist the deaf student will also assist these students—TV, movies, role playing, captioned audiovisual materials. Still other students will have difficulty with sequential memory tasks involving letters (spelling), numbers (mathematics), and following step-by-step instructions. For these students it will help to break up tasks into smaller parts. Tutoring in math and spelling usually will be required. In general, the learning disabled student will learn better the more sense modalities used in the teaching/learning process—visual, auditory, tactile, kinesthetic.

Because the *expectation* is that a college student will absorb information, communicate it and be evaluated through the printed page, the learning disabled student will need assistance and support from professors in finding innovative ways of receiving and transmitting information and in being evaluated. Because a learning disability is "hidden," the instructor may have understandable doubts about the validity of these alternative approaches. However, the fact remains that the student's capacity for learning is intact. It is only the means by which information is processed that is different.

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Source: Smith, L.M. The College Student with a Disability: A Faculty Handbook. Washington, D.C.: U.S. Government Printing Office, 1980, p. 12.
Available from: The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

# LEARNING DISABILITIES

**What is a learning disability?**

The term *learning disability* has been used to describe a variety of problems in acquiring, storing, and/or retrieving information.

Students with learning disabilities receive inaccurate information through their senses and/or have trouble processing that information. Like static on the radio or a bad TV picture, the information becomes garbled as it travels from the eyes, ears, or skin to the brain.

This inaccurate sensory information, sometimes called perceptual problems, leads to difficulty in academic work. The student might have difficulty reading, writing, speaking, or listening. These skills either have not been learned, have been learned after heroic work, or have been learned poorly.

The most commonly used definition is taken from The Education for All Handicapped Children Act of 1975, Public Law 94-142. It states:

> The term "children with specific learning disabilities" means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. Such term does not include children who have learning problems which are primarily the result of visual, hearing or motor handicaps, of mental retardation, of emotional disturbance, or environmental, cultural or economic disadvantage.

**What are the problems associated with various learning disabilities?**

Many handicaps come under the term *learning disabilities*. Following are those that most hinder academic performance.

*Visual perceptual problems.* Difficulty taking information in through the sense of sight and/or processing that information.

*Visual figure-ground problems.* Difficulty seeing a specific image within a competing background; for example, seeing the teacher's face when he or she stands in front of a blackboard with writing on it or picking out one line of print from other lines on a page. People who have this problem cannot see things that others can see. One line of print on the page appears to be missing.

*Visual sequencing problems.* Difficulty seeing things in the correct order, for instance, seeing letters reversed or seeing two knobs reversed on a machine. The person who has this problem actually sees the word incorrectly; he or she sees *was* instead of *saw*.

*Visual discrimination problems.* Difficulty seeing the difference between two similar objects, such as the letters *v* and *u* or *e* and *c*; between two similar chemical symbols; or between two types of leaves.

*Auditory perceptual problems.* Difficulty taking information in through the sense of hearing and/or processing that information. People with this problem frequently hear inaccurately. A sequencing or discrimination error can totally change the meaning of a message. For example, one might hear, "The assignment is due in May," rather than "The assignment is due today." People with auditory handicaps frequently do not hear unaccented syllables. They may hear "formed" instead of "performed," or "seven" instead of "seventy." Some auditory preceptual handicaps are:

- *Auditory figure-ground problems.* Difficulty hearing a sound over background noise, for instance, hearing the professor lecture when an air conditioner is humming in the room, hearing one bird chirp while other birds and insects are singing, or hearing someone talk at a party when music is playing.
- *Auditory sequencing problems.* Difficulty hearing sounds in the correct order, for instance, hearing "nine-four" instead of "four-nine," hearing "law" instead of "wall," or hearing music garbled because the notes are perceived out of order.
- *Auditory discrimination problems.* Difficulty telling the difference between similar sounds such as "th" and "f" and "m" or "n," hearing "seventeen" instead of "seventy," or hearing an angry rather than a joking tone of voice.

*Motor problems*. Difficulty moving one's body efficiently to achieve a certain goal. Following are some motor problems:

- *Perceptual motor problems*. Difficulty performing a task requiring coordination, because of inaccurate information received through the senses. This may result in clumsiness, difficulty in participating in simple sports, and awkward or stiff movements.
- *Visual motor problems*. Difficulty seeing something and then doing it, such as copying something off a blackboard or learning a dance step by watching the teacher.
- *Auditory motor problems*. Difficulty hearing something and then doing it, such as following verbal directions on a test or taking notes in a lecture.

*Intersensory problems*. Difficulty using two senses at once or associating two senses, for instance, not realizing that the letter *D* that is seen is the same as the sound "D."

*Handicaps Classified by Academic Difficulty*

*Dyslexia*—Inability to read.
*Dysgraphia*—Inability to write.
*Dyscalculia*—Inability to do math.

National Organizations and Associations

Association for Children and Adults with Learning Disabilities (ACLD), 4156 Library Road, Pittsburgh PA 15234. Phone: (412) 341-1515.
*Description:* ACLD is a nonprofit organization whose purpose is to advance the education and general welfare of children of normal or potentially normal intelligence who have learning disabilities.
*Periodicals*: *ACLD Newsbriefs* (newsletter), six issues/year, included with membership of $10/year or available by subscription for $4.50.

The Orton Society, 8415 Bellona Lane, Towson MD 21204. Phone: (301) 296-0232.
*Description*: The Orton Society is an educational and scientific association founded in 1949. Members are concerned with the diagnosis and treatment of specific language disability or developmental dyslexia.
*Periodicals*: *Perspectives on Dyslexia* (newsletter), *Bulletin of the Orton Society* (annual journal), included with membership of $25/year, or available separately for $7.00.

The Council for Exceptional Children's Division for Children with Learning Disabilities (DCLD), 1920 Association Drive, Reston VA 22091. Phone: (703) 620-3660; Toll Free: (800) 336-3728.
*Description*: The purpose of DCLD is to promote the education and general welfare of children with specific learning disabilities through improving teacher preparation programs, improving local special education programs, resolving the research issues, and coordinating activities with other CEC divisions and with professional organizations outside the Council structure. Membership: CEC $25/year, DCLD $8/year.
*Periodicals*: *Learning Disability Quarterly* is issued to the membership four times a year. Content includes educational articles with an applied emphasis that focuses on learning disabilities. *LDQ* is available by subscription to nonmembers ($12.50 per year domestic; $16.00 per year PUAS, libraries, and other countries). Single copy price is $3.50.

Prepared by Dale Brown, Public Information Specialist, The President's Committee on Employment of the Handicapped.

ERIC A Product of the ERIC Clearinghouse on Handicapped and Gifted Children
1920 Association Drive, Reston, Virginia 22091
1980

# SUGGESTIONS FOR ASSISTING LEARNING DISABLED STUDENTS

Bernard Horowitz
SUNY Agricultural & Technical College at Cobleskill

*"While we encourage a team approach, student, instructor, advisors, learning center, and counselor, our goal is to make the [learning disabled] student responsible for both planning and executing. As a rule, we move to this gradually so that by the end of the first year the student takes the initiative for lining up the list of text books, ordering materials, seeking tutors, etc. We believe that there should be a concentration on the strengths of the student rather than his weaknesses. We usually find the individual is more responsive to this approach. One must be careful to maintain balance: for example, in the reading area, encourage the movement from tape plus text to text alone. Encourage writing even when it is difficult.*

*"Keep in mind that we are working with maturing young adults who are dynamic human beings who happen to have a disability that makes academic work difficult. They are very concerned about making a living and taking care of themselves."*

Bernard Horowitz, Former Director of Counseling, Emeritus Faculty, SUNY Agricultural & Technical College, Cobleskill, New York

March 9, 1979

TO: Faculty
FROM: Counseling Center
RE: Suggestions for Assisting Learning Disabled Students

The presence of a student handicapped by a learning disability presents some special problems in classroom instruction for both the student and faculty member involved. A learning disabled student may rely on an auditory mode of learning and often employs techniques developed to aid the visually impaired student. These techniques are necessary due to the nature of the handicap specifically the student's inability to handle printed material such as texts, class handouts, quizzes, etc. The auditory mode also adds to the workload of the faculty member who assists the student since the student requires special attention, including oral testing. Due to the cooperation of faculty members the auditory mode has aided several students.

Through organizations such as Recordings for the Blind and the Library of Congress students have been provided audio tapes. The content of these tapes ranges from textbooks to current periodicals and are provided at no cost to the student. Material that has not previously been recorded for the handicapped will be recorded on request. Arranging for audio tapes must be done before a semester begins since there is a rather lengthy time lapse between the time the material is ordered and when it is received.

Students also use audio tapes to record class discussions and lectures. Recorded lectures can be reviewed and the student derives notes from these tapes. Often the notes are also taped.

Visual aids may present a problem to the learning disabled student. For example, material presented on an overhead projector is usually visible for a very short time and the student cannot comprehend it within those time limits. This problem can be overcome by making an overlay available to the student. If the student can borrow the overlay it can be duplicated using a xerographic copier and then studied at a later time.

Oral testing will provide the faculty member with a more accurate measure of the student's mastery of course material. Evaluation of the learning disabled student requires cooperation between student and professor to arrive at a way to measure the student's progress. Since impaired reading and writing skills are typical of the learning disabled student, evaluation should focus on the student's ability to communicate in another manner. Perhaps the student could tape a response, give a speech, take pictures, or any other appropriate means of communication.

The academic advisor to a learning disabled student plays a very important role in assisting the student. The student's program must be carefully mapped out and monitored by the advisor. At times the learning disabled student may need to adjust their schedule by dropping a course or even attend for more than four semesters.

The techniques discussed involving an auditory mode of learning have been successful with learning disabled students. We are interested in any other successful techniques that you may be aware of and willing to share. The assistance provided to the learning disabled students is greatly appreciated and the Counseling Center is willing to assist you in any way possible in this effort.

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Source: Memo to Faculty from Bernard Horowitz, Director, Counseling Center, State University of New York Agricultural and Technical College at Cobleskill, March 9, 1979.

## SUITABLE STRATEGIES FOR WORKING WITH LEARNING DISABLED COLLEGE STUDENTS

Toward increasing an awareness about what you, as a college professor, can and should do to assist learning disabled students, perhaps the first priority should be to develop a few ideas about what you are not expected to do.

First, you are not expected to lower your own standards of teaching excellence. Learning disabled students are not in your class for a free ride nor the gift of a good grade. A grade for them should be based on how much they have learned, not on sympathy for their plight. Having earned the right to be in college, they have also earned the right to fail.

Second, you are not asked to be an educational therapist--part of whose job is to "remediate" or diagnose or prescribe. In the first place, these students have probably been "remediated" until it is coming out their ears. If they are not "cured" by the time they reach college, then it is time to take a different approach. Some learning disabilities will never be cured, any more than some blindness or deafness can be cured. Further, if there is any possibility that more remediation can be accomplished, it should be done under the supervision of a learning center in your institution, staffed by experts in the field.

But there are some things you can and should do--strategies with which you can personally be comfortable. Many of them you may already have employed in working with blind, deaf, and physically handicapped students. The strategies by which a learning disabled student may be helped to "make it through" and get the most out of college fall into three main categories: helping the student to find alternate ways of learning and retaining the required material; developing alternate means of testing the student for comprehension of the material covered in your course; and, as a counselor and friend, lending support to the student in his need and desire to become a socially competent adult.

### ALTERNATE WAYS OF LEARNING

If you have no problem with assisting blind students in your classes by allowing their seeing-eye dogs to remain at their side, letting them use a note-taking device or recorder or a reader, then you should have no problem in allowing an individual subject to visual dysperception to use the same kinds of devices.

There is another characteristic which may commonly be found among learning disabled students. Because they have been in special education classes during secondary school years, they have not been instructed in the use of some common learning tools. So much of their school time has been spent on remediation that there has been no time for them to receive instruction in how to write essays, how to organize and write a book report, and how to research and write term projects. Mastering these techniques in order to fulfill the requirements of college classes, while at the same time learning course content, is a heavy burden for the learning disabled to carry. If you discover a student in this situation, perhaps you could take the initiative in providing a tutor who could assist the student in learing the mechanics of preparing such papers.

### ALTERNATE MEANS OF TESTING

Again, many learning disabled students have probably arrived at college, never having had to take standard forms of examinations. Most of their testing may have been the open book form. They have probably not been subject to time limits in testing. Therefore, when they flunk your examination they may have, in reality, flunked testing, not the subject in which they were tested.

Again, if you have no problem with the idea of giving a blind student an oral examination or an interpreter reporting on what a deaf person is saying, you should have no great potential problem in providing alternative means for a learning disabled student to report on what he has learned. For some of them, merely allowing a longer time period for answering questions may suffice. For those whose language or reading problems diminish their ability to give a true accounting of what they have learned by answering multiple choice or true-false questions, perhaps a little more effort might be required to construct a test that would more truly demonstrate their knowledge. Oral exams, hands-ons demonstrations, or open book tests might be the answer. For the aphasic person for whom an oral report might be a total impossibility, perhaps an exhibit of some sort could be substituted.

If a teacher looks upon testing as a sort of competition between the teacher and the student in which trick wording and minor points are used to catch and confuse, then the learning disabled student will inevitably come out the loser. If more appropriate testing methods are used, both the student and the teacher may have the satisfaction of knowing that their mutually dependent goals of learning and teaching have been successful. It must be emphasized that there is no one answer for all learning disabled students. The challenge is to find the particular strategy which will work for the particular student.

### DEVELOPMENT OF SOCIAL COMPETENCY

Blind people sometimes need seeing-eye dogs. Deaf people sometimes need interpreters. Orthopedically handicapped people sometimes need crutches. Learning disabled people sometimes need a "talking mouth."

The seeing-eye dog has three main functions: (1) to see obstacles, people and hazards for the blind person and interpret the obstructions to them; (2) to be seen by others who will augment the dog's efforts; and (3) to free the blind person from isolation and dependency and guide him into the mainstream.

The talking mouth has similar functions: (1) to see the obstacles to social competnce that the socially incompetent individual does not perceive and to interpret them to that person; (2) to speak to others who do not have the same understanding of the problem so that they may assist in guidance; and (3) to steer the socially dysperceptive person into the social mainstream by helping that person to recognize and face the issues.

If, as teacher, you are willing to take over some of the functions of the talking mouth, how do you go about it? You can take some cues from the seeing-eye dog! First, you can "see" obstacles, people, and hazards which may elicit

Source: Chesler, B. A Talking Mouth Speaks - About Learning Disabled College Students. California, "A Song," 1980; pp. 16-20.
Available from: "A Song" P.O. Box 2206, Sacramento, California 95822.
A guide for postsecondary instructors and counselors to help them recognize and work with learning disabled students. Students may use this book in working with counselors to plan an effective educational program.

incorrect behavior from the learning disabled person and interpret them to him. For example, if you see him acting or speaking or dressing inappropriately for a college student, explain this to him privately and frankly. If he seems to be oblivious to things like due-dates, exam schedules, required appointments, a few gentle nudges and reminders might be in order. If it appears that he is unaware that he is headed for failure, make him aware of it and help him to obtain tutors or whatever learning aid he may profit from.

If you see that he is being made the butt of class pranksters and is seemingly oblivious to this, an explanation of his provocative behavior would be helpful to him. Even if it may seem as though their failings and the remedies for them should be obvious, socially dysperceptive people may need emphatic and repetitive explanations and patient assistance to speed up their process of maturation.

We have said that the second function of the talking mouth is to speak to others who do not have the same understanding of the problem. This is one of the most valuable contributions you can make. The simplest approach is to pass information along to the student's other teachers, telling them what you have learned about how he learns best, what special tools you use to convey information, what kinds of tests he is able to handle, and the like.

A good talking mouth will also take on some press-agenting. As supported by the list of successful learning disabled people in the first chapter of this booklet, most learning disabled people have some skills and talents which they use well. In fact, some have truly remarkable talents. It will contribute both to the individual's self-esteem and the public's image of these people if a caring talking mouth takes public notice of such triumphs.

The third function of the talking mouth is to aid students to find their places in the mainstream by helping them to recognize, understand, and face the issues. The only difference with learning disabled people is that it takes more help. Learning disabled people often seem to come of age with more than the ordinary youth's oblivion of major events, issues, customs, and social skills. Their immaturity is so evident that it makes other people uncomfortable in trying to communicate with them. It makes it difficult to carry on a conversation with them. The recreational skills which are needed by adolescents and young adults seem to be beyond their grasp. Therefore, many learning disabled adults are loners and lonely people.

An effective talking mouth will find that the basic formula for assisting these worthwhile young people is to assume both the privileges and obligations of simply being a friend, in the finest sense of the word. That kind of friend is one who can be counted upon to be lovingly, tolerantly, patiently and, if need be, "brutally" frank; one who can offer guidance and support, but not tolerate dependence; and one who can be understanding and accepting when the young friend is inept in expressing gratitude.

* * *

"I WAS A DYSLEXIC..." Nelson A. Rockefeller

"I was a dyslexic, or 'reverse reader'...and I still have a hard time reading today..."

"Based on my own experience, my message to dyslexic children is this:

- Don't accept anyone's verdict that you are lazy, stupid or retarded. You may very well be smarter than most other children your age.
- Just remember that Woodrow Wilson, Albert Einstein and Leonardo da Vinci also had tough problems with their reading.
- You can cope with your problem and turn your so-called disability into a positive advantage...

"No one had ever heard of dyslexia when I discovered as a boy, along about the third grade, that reading was such a difficult chore that I was in the bottom one-third of my class...Along with an estimated three million other children, I just struggled with words that seemed to garble before my eyes, numbers that came out backwards, sentences that were hard to grasp.

"And so I accepted the verdict of the IQ tests that I wasn't as bright as most of the rest of my class... While I could speak better French than the teacher, because I'd learned it as a child, I couldn't conjugate the verbs; I did flunk Spanish but now I can speak it fluently because I learned it by ear, later, at the Berlitz School.

"My best subject was mathematics; I understood concepts well beyond my grade level. But it took one reversed number in a column of figures to cause havoc.

"And I made it...into Dartmouth...by the skin of my teeth. I made it simply by working harder and longer than the rest...eventually learning to concentrate sufficiently to compensate for my dyslexia... Thanks to my concentration and the very competitive nature I was born with, I found my academic performance gradually improving...I owe a great debt to my professors and to President Ernest M. Hopkins...I made Phi Beta Kappa in my senior year...

"My personal discoveries as to what is required to cope with dyslexia could be summarized in these admonitions to the individual dyslexic:

- Accept the fact that you have a problem...don't just try to hide it.
- Refuse to feel sorry for yourself.
- Realize that you don't have an excuse...you have a challenge.
- Face the challenge.
- Work harder and learn mental discipline...the capacity for total concentration...and
- Never quit.

"If it helps a dyslexic child to know I went through the same thing but can conduct press conferences today in three languages, and can read a speech on television (though I may have to rehearse it six times) with my script in large type and my sentences broken into segments like these...and long words broken into syllables), and learned to read and communicate well enough to be elected Governor of New York four times..., and to win Congressional confirmation as Vice-President of the United States...

"Then I hope the telling of my story as a dyslexic could be an inspiration to the 'puzzle children'...for that's what I really care about."

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Source: Chesler, B. A Talking Mouth Speaks - About Learning Disabled College Students. California: "A Song," 1980; pp.25-27. Excerpts reprinted from an article by Nelson A. Rockefeller originally published in TV Guide Magazine, October 16, 1976.

# LEARNING PROBLEMS OF THE SECONDARY AND JUNIOR COLLEGE LEARNING DISABLED STUDENT - SUGGESTED REMEDIES

Michael S. Kahn
Rollins College

At the secondary and junior college level of education, the teacher's responsibility is to teach content, and not to cure learning problems. Teaching methods should be adjusted to coincide with the student's actual learning style. Such adjustment circumvents the student's learning problems and caters to strengths (Zigmond 1976, Kaluger and Kolson 1969, Hayes 1974, Bruechnern 1947). For example, for the student with a visual problem, the teaching approach should emphasize hearing and speaking. Conversely, auditory problems can be circumvented by teaching to the student's visual modality.

Most learning disabled students try their best, but their efforts often fall short of standards. Such students need additional clarification, support, enlightenment, organization, and structure. A helpful and understanding teacher is needed—not a punitive one. The purpose of this article is: (1) to create an observational awareness of visual, auditory, and general symptoms of the learning disabled adolescent; (2) to suggest classroom methods for circumventing these learning problems.

## General

A. Behavioral characteristics
   1. Learning difficulty not attributable to impaired vision, hearing, intelligence, emotional or environmental well-being, plus underachievement in certain, but not all, academic subjects.
   2. Weak study habits
      a. inability to organize and budget time
      b. slow to start tasks
      c. difficulty completing tasks
      d. poor notetaking and outlining skills
      e. struggles using reference materials
   3. Discrepancy in quality of oral and written work
   4. Poor attention span
      a. overactivity - constantly on the move
      b. underactivity
      c. distractibility
   5. Language problems
      a. substituting easier words for complex words
      b. trouble verbalizing answers and speaking in whole sentences
      c. refraining from discussions or questions
      d. forgetting, confusing, or misarticulating words
      e. difficulty describing objects and defining simple vocabulary
   6. Poor short- and long-term memory for information presented in class
   7. Floundering when trying to follow oral or written directions
   8. Disorganized thoughts
   9. Lack of gestures when talking
   10. Confusing left and right sides
   11. Motor coordination problems
      a. unorganized
      b. sloppy
      c. clumsy - walking, running, holding pens and pencils
      d. failure to swing arms when walking or running

B. Suggestions to compensate
   1. Set learning priorities and teach accordingly (these students cannot master everything)
   2. For all class sessions, review previous material, preview material to be presented, and help students summarize the material just presented.
   3. Eliminate such classroom distractions as excess noise, physical motion, flickering lights, shiny jewelry, and loud clock ticking.
   4. Whenever possible make alternative assignments
      a. for incomplete or incorrect work, give an alternative assignment - not a redo of the original assignment
   5. Notice and respond to nonverbal and verbal signs of anxiety or frustration
   6. Have a student helper assist students with lectures and assignments. The helper could take lecture notes or correct the students' lecture notes
   7. Make sure that the student understands what you have said, done, or demonstrated; then move on to more complex material
   8. Provide and teach memory tricks (mnemonics)
   9. Teach the student to proofread assignments and tests
      a. the teacher or student helper could read the student's work back to him until the student is capable of proofreading himself
   10. Teach and encourage the student to use all teaching modalities (visual, auditory and motor—notetaking from lectures) To help students take lecture notes:
      a. provide introductory activities for the lecture by reviewing previous day's lectures
      b. supply students with sufficient time to review notes
      c. discuss new and previously introduced vocabulary words and concepts
      d. teach a shorthand and/or abbreviation system

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Source: Kahn, M.S. Learning problems of the secondary and junior college learning disabled student--suggested remedies. Journal of Learning Disabilities, 1980, 13(8).

e. during the lecture the teacher should
   1) talk distinctly and at a rate that the students can follow
   2) give an organized lecture
   3) stop periodically and encourage questions
   4) give unmistakable clues to identify and emphasize important information (for example, "This is important." "The main points are," "This could be a test question.")
   5) repeat major information
   6) refer students to important textbook pages; use such visual devices as blackboards, overhead projectors and dittos to stress information
f. after the lecture the teacher should
   1) help the students summarize the lecture
   2) recognize students' notetaking skills and when needed provide additional instruction
   3) give students time to edit notes and ask questions

11. Encourage the students to reflect on a task before starting it
12. Capture student attention before beginning class
13. Emphasize meaningful associations, be organized, and relate to student experiences
14. Give individual conferences to guide students and monitor understanding of assignments and course content
15. Frequently review material and check comprehension
16. Take the time to give good directions
    a. have students' attention before starting
    b. tell students purpose of activity
    c. give direct and uncomplicated directions
       1) use correct grammar and vocabulary students understand
       2) be seen and heard clearly
       3) be concise and give sequential steps for students to follow
       4) be relaxed and positive
       5) minimize distractions
       6) make sure written directions are legible
    d. tell class what materials to use and where to find them
    e. vary ways to give directions
       1) oral, direct from the teacher or recorded on tape (so student can replay directions)
       2) written on ditto paper, blackboard, or overhead projector
       3) demonstrate what is to be done
    f. clarify directions before starting the activity
       1) work on example together
       2) display a completed project
       3) encourage questions
       4) have students start the activity, then walk around room checking on student progress
    g. encourage students to write down, copy, or tape record directions
    h. with long-term assignments, ask for periodic status reports
17. Encourage students to keep only materials necessary for class on their desks
18. Set time limits for classroom activities
    a. during examinations keep a clock visible and post time remaining
19. Help the students be organized by:
    a. posting a weekly schedule of class and study times
    b. listing materials needed for class
    c. posting when assignments are due
20. Teach students to use textbook sections: glossary, index, table of contents, introductions, summaries, and graphics
21. Instead of solely large group activity, provide for small group or independent projects
22. Keep extra supplies of paper, pens, and books
23. Have the students work in a study carrel
24. Give several short classroom activities instead of one long activity
25. Make furniture arrangements easy to maneuver around

## Visual

A. Behavioral characteristics to note
   1. Problems with visual tasks
      a. loses place easily
      b. becomes bored, restless, frustrated
      c. seems uncertain in recalling visually presented information
      d. shows signs of eye problems (rubbing, headaches)
   2. Mechanical problems taking examinations
      a. places answers in the wrong spots
      b. cannot draw lines on a matching test
      c. poorer performance when using a separate answer sheet
   3. Preference for auditory activities
      a. when shown a sound film, pays more attention to source of the sound than to the movie screen
      b. listens to lecture without making eye contact
   4. Preference to avoid pictures and graphics
      a. difficulty interpreting
      b. slow rate of perception
      c. poor recall of information
      d. inattentiveness
   5. Problems with oral and silent reading
      a. word-by-word or syllable-by-syllable reading
      b. excessive lip movement or vocalizing in silent reading
      c. body motion while reading
      d. numerous oral reading errors: mispronunciation (both gross and minor), omissions, substitutions (meaningful and nonsense), hesitations, short eye-voice span, regressions
      e. poor comprehension
      f. slow reading pace
      g. substandard reading level
      h. mistaking words that look similar
      i. using finger to keep place
      j. failure to recognize a word when it reappears
      k. easy eye fatigue
      l. participation better with materials presented in class (as opposed to read for class)

6. Oral spelling better than written spelling, or often words written phonetically
7. Visual-motor problems when printing, writing, copying, and drawing
   a. reverses letters, words, phrases
   b. seems sloppy and careless
   c. constantly refers to the visual model
   d. spaces poorly
   e. unorganized
8. Notices visual stimuli usually unnoticed by other students (marks on blackboard, etc.)
9. Seems more confused if visual material is crammed together (difficulty using a map, dictionary)
10. Responds better to verbal directions
11. Difficulty focusing and following print when going from far-to-near or near-to-far vision (looking from the blackboard to the textbook)

B. Suggestions to compensate
   1. Allow student to verbalize whenever possible
      a. before writing, let student state topic preference
      b. when studying, read material, lecture notes, and directions aloud
      c. with visual information, have the student summarize what is seen
   2. Suggest that the student tape record lectures and directions for assignments
   3. Provide more auditory presentation of information
   4. Write legibly, use large type, do not clutter blackboard
   5. In visual presentations, preview and review the material and help students summarize it
   6. Have a consistent format for papers and assignments
   7. To compensate for verbal expressional dysfunctions
      a. allow student to write answers before responding
      b. ask questions he can answer
      c. answer in written form evaluative and appreciative questions (Barret's Taxonomy)
   8. To compensate for reading problems
      a. explain purpose of readings: critical analysis, overview, pleasure and appreciation, application, skim for main idea, scan for specific information
      b. ask sound comprehension questions: start with the literal, move to inferential, then evaluative, and end with appreciative level questions
      c. find materials paralleling the textbook but written at a lower reading level
      d. tell the student to use a ruler or blank white index card to hold reading place
      e. have the student read silently, then orally
      f. while listening to a tape recording of a good reader, have the student read silently and follow along.
   9. Visual-motor problems
      a. encourage use of tape recorder for examination and lecture notes
      b. lower standards of acceptable writing
      c. encourage the student to use the typewriter when writing a paper or taking a test
      d. tape lecture material and assignments for student use
      e. for notes or test, encourage the student to use graph paper and write cursively (one letter per block) and to use pens and pencils that produce dark black lines
      f. if student is expected to write in class allot sufficient time.
   10. Minimize visual stimuli: portable study carrels provide an effective environment
   11. Have the student keep a file of his most commonly mispelled words
   12. Challenge far vision (blackboard) and near vision (ditto papers) simultaneously
   13. Reinforce all visual directions with verbal clues

## Auditory

A. Behavioral characteristics
   a. Seems to hear but not to listen
      a. makes inappropriate responses
      b. hesitates before responding to oral questions
      c. ignores, confuses and/or forgets verbal directions
   2. Has problems of articulation, enunciation, grammar, limited vocabulary, speech pace
   3. Has trouble blending syllables or pronounces words as they physically appear
   4. Has difficulty understanding and paying attention (day dreaming, hyperactive, blank expression on face) to oral activities and presentations
   5. Seems perplexed when trying to understand people who speak quickly or quietly, as well as those who move while talking
   6. Has problems with academic subjects taught orally
   7. Spells poorly
   8. Easily distracted by noises inside and outside classroom (noises unnoticed by other students)
   9. Frequently asks what just has been said (What?, Huh?)
   10. Substitutes gestures for words
   11. Watches the speaker's lips
   12. Often looks at others before following directions

B. Suggestions to compensate
   1. Use short one-concept statements
   2. Encourage the student to tape each lecture
   3. Talk at a slower rate
   4. Face the student whenever possible
   5. Do not penalize for incorrect spelling but correct the spelling
   6. Encourage the student to select a seat that is clear of written graffiti, near a blackboard or overhead screen, and far removed from auditory disturbances
   7. Tape classroom lectures
   8. Encourage the student to visualize material that has been orally presented (revisualize material before answering questions)
   9. Whenever possible, keep visual clues
      a. brief written outline of the material to be covered during that class session
      b. examples on the chalkboard or overhead projector
   10. Encourage the student to rewrite his lecture notes

# Coping With Specific Disabilities

## PRACTICING YOUR PERCEPTION

Perceptual problems can be improved by practice. Some people think this can't be done. They forget that normal people improve their perception through training and effort. A piano tuner improves his already good auditory discrimination. A medical student learns to visually discriminate subtle shadows on x-rays.

But people with perceptual problems are handicapped. If you have a visual figure-ground problem, you may work as hard as that medical student just to be able to spot your friends in crowded places. Or, if you are uncoordinated, you may have to train as hard as any football player in order to throw and catch a Frisbee.

Activities that use your areas of perceptual weakness can help you practice them. A few examples follow:

**Visual figure-ground problems** — Look around you and focus on objects. Look at a forest and study each tree. Study the lawn, find an insect and watch it move. Choose a specific person in a crowd and watch what she does.

**Auditory sequencing problems** — Listen and then repeat. This can be done by playing a taped conversation, repeating a sentence from memory and playing that section of the tape again to check yourself. In conversations, say "So what you are saying is . . ." and repeat what you heard. Check and see if you were correct.

**Tactile discrimination problems** — Go to stores and feel the different textures of similar items. Can you tell cotton from wool? Ripe from unripe fruit? In the woods feel the leaves and the bark on trees. Study shapes and textures.

Make a game out of practicing your perception. Don't work too hard. Find a level that challenges you but isn't too difficult.

Hobbies in your area of weakness can be fun: for example, bird watching improves visual perception. Stamp collecting helps visual motor skills and visual perception. Listening to music helps auditory perception.

Although practice can improve your perception, it probably won't make the handicap disappear. How can you limit its effect on your life? The next sections on visual and auditory handicaps will give you some ideas.

## LIVING WITH VISUAL PERCEPTUAL PROBLEMS

**Improve your environment** — Home and office should be simple, uncluttered and well organized. Color codes and labels help to keep things in order. Keep important objects where you can see them. Shelves and pegboard walls are better than drawers. Mark your automobile so you can find it in a crowd of cars: for example, put a large object on the antenna or use a vanity license plate. If you have problems following your companions in a crowd, ask them to wear bright colors.

**Improve your habits** — Karl solved his grooming problem with an organized routine. Good habits can reduce your need for accurate visual perception. Have a place for important objects and train yourself to put them there: for example, always put your keys in a specific place.

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Source: Brown, D. Steps to Independence for People with Learning Disabilities. Washington, D.C.: Parents' Campaign for Handicapped Children and Youth, copyright by Closer Look 1980, pp.35-39.
Available from: HEATH/Closer Look Resource Center, P.O. Box 1492, Washington, D.C. 20013.



When you leave your house, have a routine for keeping track of items such as your umbrella, purse and gloves: for example, you may want to always keep your briefcase in your lap. When you leave an area, be sure to have everything with you.

**Find objects you lose** — No matter how careful they are, people with visual perception and memory problems often lose things. If you can't find something, keep calm. Try to remember when you had it last. What did you do with it? Then relax your eyes and look for it. Don't look carefully by focusing your eyes first in one place, then another. Swing your eyes all over the room. Use your peripheral vision. If you still can't find it, consider waiting until it shows up. Can you buy another? If you need it, systematically look in and under things. If it's still missing, take a long break and start over.

If you lose things frequently, keep duplicates of important cards that go in your wallet, such as your identification card or library card. Leave extra keys with your neighbor or taped to the bottom of your office desk. Reproduce documents that should not be lost. Buy two or three umbrellas, scarves, pairs of gloves and other frequently lost items.

**Use your hands to help your eyes** — Study shapes, textures and weights with your hands: for example, good quality paper is usually heavier and stiffer than poor quality paper.

**Use your ears to help your eyes** — When a task is being demonstrated, pay more attention to the words than to the actions. Ask questions. The sound of someone's voice can substitute for an expression on her face. Tapes can replace books.

## LIVING WITH DYSLEXIA

**Learning without reading** — For people who can't read, taped books can substitute for written ones. Lectures can also be taped. Individuals with dyslexia are eligible for two recorded book progams:

Recording for the Blind, Inc. (RFB), 215 East 58th Street, New York, New York 10022. RFB is a national, non-profit service organization which supplies recorded educational materials to visually, physically and perceptually handicapped students and professionals free of charge. RFB supplies clients with duplicated tapes of books currently in its recorded library of 50,000 texts and also tapes new material. Services are provided to individuals only. To register with RFB you must complete an application. If you are learning disabled, you must state in detail the exact nature of your disability, how it prevents you from reading normal printed material, and a doctor must sign it. Application information is held in confidence.

National Library Service for the Blind and Physically Handicapped, The Library of Congress, Washington, D.C. 20542, (202) 882-5500. To use this service, you must have a doctor certify that you have a "reading disability due to organic dysfunction." Check with your local public library about applying.

At school you can arrange ways for meeting your academic needs. Analyze your learning style and use your strong areas. Dian Ridenour who has dyslexia recognized that she had excellent auditory perception. She found classmates in her school who were interested in forming a study group. The classmates read the material and a group discussion followed. There are many things you can do to satisfy your own study needs. Use your imagination and find creative solutions. Another idea: check into classes on educational television. Sometimes arrangements can be made for credit through your local college or university.

**Communicating without writing** — Make phone calls instead of writing letters. Use the Yellow Pages since it has pictures. If you have to pay for telephone information in your area, call your telephone company business office and ask for an exemption form. All you need to do is write down your disability, why you can't use the phone book and the name and address of the doctor who knows your condition. This will excuse you from charges.

If you must write a letter, dictate it to a secretary. Find typists who excel in proofreading, grammar and spelling if you are unable to check their work. If you can't afford to pay, find a service you can trade with a friend.

**Working without reading** — Jobs which require a lot of reading may have to be avoided. But remember blind people fill many professional jobs by using tape recorders and paying readers. The pamphlet "Dilemma of a Dyslexic Man" by Bert Kruger Smith describes how Dwayne, a reserve policeman, successfully coped with his dyslexia and performed the duties of his job. "I carried a clipboard," he said. "And when I had to check some infraction, I looked at the front sheet where the various ones were listed. Then I would copy a word very carefully. Often when I had to write a name and address, I would ask the person himself to write it." (This pamphlet and the sequel "Free to Learn" can be purchased as a set for 50 cents. Contact: The Hogg Foundation for Mental Health, Publications Division, P.O. Box 7998, University Station, The University of Texas, Austin, Texas 78712.)

Dwayne also had to write reports. He worked out an exchange. He did the leg-work for a coworker's report, and the coworker did the writing for Dwayne's report.

Dwayne illustrates two principles for working without reading:

- Write out or memorize important words.
- Exchange tasks that involve reading and writing for other tasks.

**Remediation** — Learning, communicating and working without reading are not easy. Some adult dyslexics choose to undergo the difficult process of learning to read. If you make that choice, avoid clinics that do not know about learning disabilities. They may say that "you're just not trying." Find a teacher who is experienced in instructing adult dyslexics. The Orton Society, which devotes itself to helping individuals with specific language learning disabilities, may be able to guide you toward such a teacher. Write The Orton Society, Inc., 8415 Bellona Lane, Suite 113, Towson, Maryland 21204, or call (301) 296-0232.

## LIVING WITH AUDITORY PERCEPTUAL PROBLEMS

**Improve your environment** — Limit the background noise around you. Try to live and work in quiet places. Turn on appliances and listen to them before buying them.

**Use your eyes to help your ears** — Look at people's faces and lips as you listen. Watching them do things will reduce your need for explanations: for example, if you are going to work at McDonald's, watch people work in another McDonald's before you begin the job. Read a lot to learn what you may not "pick up" through hearing.



**Follow directions carefully** — If directions are given verbally, repeat them. As you say them, make sure people are listening to you. If possible, write them down or ask to receive them in writing. You may have to ask for one direction at a time. But no matter what, be sure to remember the *first* thing you are told, so that your first step will be correct.



## LIVING WITH BOTH AUDITORY AND VISUAL PERCEPTUAL PROBLEMS

Some people have both visual and auditory perceptual handicaps. This causes insecurity. Neither sense can be trusted. One sense cannot easily be used to compensate for the other. If you have this problem, decide if one sense is actually stronger and use it to help the weaker one. If both senses seem equally inaccurate, practice your perception as proposed on page 35, working with one sense at a time. Don't be surprised if your senses develop unevenly. Your ears may seem stronger for a while, then your eyes may seem stronger. For the most part, the sections on living with visual and auditory perceptual problems will apply to you.

Here are a few tips to help you learn:

- Get information from as many sources as possible, for example, if you are taking a class, you might:
  - — discuss the class with other students
  - — read or listen to as many books as possible, including books written for youngsters, if they cover your material
  - — ask if you can audit another section of the class
  - — ask your library if they can arrange for you to watch films and videotapes of the material
  - — get help from the instructor.
- Because of your double handicap, you are especially apt to make mistakes. When errors occur, correct them immediately. Don't get angry with yourself.
- Practice a lot but be careful not to overload yourself. Many short periods of effort are better than one long period of work.
- Your perception will be uneven. Some days will be better than others. Don't push yourself when everything seems to be going wrong.
- Ask yourself how you *like* to do and learn things. Use that technique. You will naturally find the most efficient way for you.
- Should you use taped books and lectures? Taped books may not be helpful as you may have to listen to the tapes many times.
- You will have to use your eyes and ears together to learn a task which is being demonstrated.

## IMPROVING PERCEPTION

It's hard to learn when both your seeing and hearing are inaccurate. Try to improve perception by:

**Paying attention** — Some people who receive inaccurate information from their senses ignore their environment. They daydream and let their minds wander. Don't let this happen to you. Struggle to be aware.

**Relaxing** — Some people who receive inaccurate information from their senses pay so much attention that what they see and hear confuses them even more. If you relax, your perception will automatically improve.

Most people with perceptual problems alternate between paying too little and too much attention. Try to find a state of relaxed awareness. Most people without learning handicaps have a section of their brain which automatically keeps them relaxed and aware. You may have to train yourself to do this consciously.

* * *

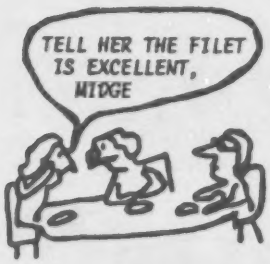
## WHAT DO YOU DO WHEN YOU SEE A "BLIND" PERSON?

a series of cartoons by the American Foundation for the Blind

If you see a blind person who seems to need help, offer your services. Identify yourself and let him know you're talking to him. Otherwise he may never know.

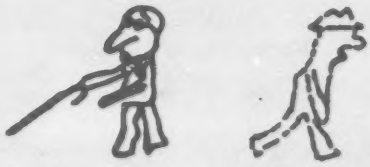
Go ahead and use words like see and look. You can't avoid them anymore than a blind person can because there are no reasonable substitutes.

A blind person can cross the street without being pushed or shoved, so if he accepts your offer, let him take your arm. He can follow the motion of your body.




Speak directly to a blind person not through a third person. Interpretation is not necessary. Blindness is not a separate language.

When you're leaving a blind person, let him know you are. Don't leave him stranded AND REMEMBER, WHEN YOU DO MEET A BLIND PERSON, COMMON SENSE AND SENSITIVITY TO OTHERS ARE MOST IMPORTANT OF ALL.



As tempting as it may be to pet a dog guide, remember that this dog is responsible for leading a master who cannot see. The dog should never be distracted from that duty.

Source: What Do You Do When You See A Blind Person? New York: American Foundation for the Blind, 1973.
Available from: American Foundation for the Blind, 15 West 16th Street, New York, New York 10011.

DEFINITIONS OF VISUAL STATUS

- Functionally blind: A person who is totally blind or has only light perception or light projection (ability to see vaguely objects that contrast highly with their surroundings).
- Legally blind: A person whose vision in the better eye, even with ordinary corrective lenses, is no better than 20/200 or whose visual field has a maximum diameter no greater than 20 degrees. Legally blind persons qualify for reading services for the blind and visually handicapped.
- Partially sighted: A person whose vision in the better eye, even with ordinary corrective lenses, is no better than 20/70 but is better than light perception or light projection, or whose visual field has a maximum diameter no greater than 20 degrees. A person may be legally blind and functionally blind, rather than partially sighted. Another person may be partially sighted but see too well to be legally blind. A third person may be both legally blind and partially sighted.
- Visually impaired: Persons who are either functionally blind or legally blind, or partially sighted.
- Fully sighted: Persons who are not visually impaired i.e., persons whose corrected vision in at least one eye is better than 20/70 and whose visual field is greater than 20 degrees.

Fully 75 percent of the 500 thousand Americans who are legally blind are not functionally blind. They are partially sighted. But not all partially sighted persons are legally blind. As of 1977, partially sighted Americans numbered about 1.7 million, whom 490 thousand were legally blind.

The legal definition of blindness leads to distortions and injustices. One of these is neglect of the specific needs of partially sighted persons. Because there are few programs and services specifically designed for partially sighted persons, professionals may try to channel them into programs for functionally blind persons. The result is that these clients do not make the best use of their remaining vision and therefore become more dependent than necessary.

Source: Problems of partially Sighted Persons. REHAB BRIEF: Bringing Research into Effective Focus, 1980, 3(4).
Available from: National Institute of Handicapped Research, Office of Human Development Services, Department of Health, Education and Welfare, Washington, D.C. 20201.

NOTABLE RESOURCES

- Aids and Applicances for the Blind and Visually Impaired: Annual Edition. Independent Living Aids, Inc., 11 Commercial Court, Plainview, NY 11803. Agency "Hot Line:" 516/681-8289. Catalog contains sections on writing and communication aids, medical devices, and tools and instruments as well as on household and personal aids for the visually impaired.

- Products for People With Vision Problems: Annual Edition. American Foundation for the Blind, Customer Service Division, 15 West 16th Street, New York, NY 10011. Phone: 212/620-2172. Catalog lists low vision products, medical products, sewing aids writing and communication aids, mathematics aids, and tools and instruments for use by the blind and visually disabled.

- Film: Not Without Sight (19 minutes, color, 16mm). Does an excellent job of putting you in the shoes of the person with reduced vision. You see what the visually impaired person sees. Five persons are used to illustrate the three main types of visual impairments: (1) where overall vision is obscured; (2) where edges of vision or parts of vision are obscured; and (3) where the center of vision is obscured. The film can be rented for $19.00 or purchased for $120.00 from the American Foundation for the Blind, Public Education Division, 15 West 16th Street, New York, NY 110011. Phone: 212/620-2172

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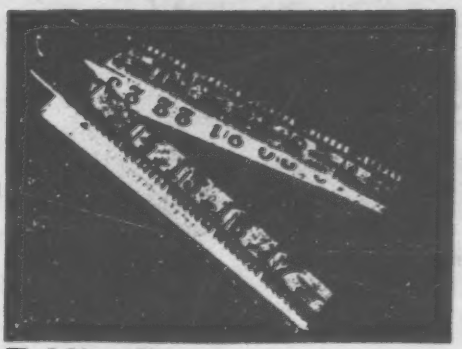

**Folding Boxwood Rule TS 329—$6.00**
**24" rule that folds into four 6" sections. Marked with a single metal dot at each inch and a similar dot, at a slightly higher elevation, at every ½". The number of each inch is indicated in braille.**

PROBLEMS OF PARTIALLY SIGHTED PERSONS

S.M. Genensky, Director of the Center for the Partially Sighted at the Santa Monica (CA) Hospital Medical Center, conducted a three-year study to determine the visual environmental adaptation problems (VEAP's) of partially sighted persons. His findings, which appear in the February 20, 1980 issue of REHAB BRIEF, include the following:

## Which Problems Are Most Severe?

*Received "yes" responses (that it was a problem) and "sometimes" responses (that it was a problem sometimes) from at least 76 of the 94 respondents:*

- Walking around alone in an unfamiliar area;
- Reading signs at bus stops;
- Determining the number or name of an approaching bus;
- Locating an unfamiliar stop while riding on a bus.

*Received 51-75 "yes" responses; at least 76 "sometimes" responses:*

- Going from bright daylight into a dark room;
- Finding the correct office on a wall directory in an office building;
- Seeing written material on a chalkboard or other distant display surface used forclass discussions or question-and-answer periods;
- Finding out what things cost in a cafeteria;
- Recognizing a familiar face across the street.

*Received 51-75 "yes" responses and "sometimes" responses:*

- Walking alone at night on a dimly lit street or in moonlight;
- Walking alone at night when it is very dark;
- Determining whether the right floor has been reached when alone on an elevator;
- Finding a public restroom;
- Telling a women's restroom from a men's restroom;
- Seeing details when viewing the stage in a theater;
- Seeing details when viewing a sports event;
- Copying material from a chalkboard;
- Following the host or hostess to a table in a restaurant;
- Reading the check in a restaurant when in the company of another person;
- Reading the menu in a restaurant when in the company of another person;
- Reading the menu posted on the wall in a fast food place;
- Reading labels on boxes or bottles of medicine;
- Reading a clinical thermometer;
- Threading a needle;
- Seeing small objects left on the floor;
- Walking alone at night on a brightly lit street;
- Going from a dark room into bright daylight;
- Finding a lobby wall directory in an unfamiliar building;
- Finding the correct office in an unfamiliar building;
- Reading the menu when alone in a restaurant;
- Reading the check when alone in a restaurant;
- Determining the gate number and departure time from a display board by oneself in an airport;
- Finding an assigned seat on an airplane by oneself;
- Recognizing a familiar face across a room;
- Reading TV Guide or the TV schedule in a newspaper, with any visual aids that the respondent uses.

*Received 11-25 "yes" responses and "sometimes" responses:*

- Getting to or from an airport building by car, taxi, or bus by oneself;
- Finding an empty seat on a bus;
- Finding a familiar stop when riding on a bus;
- Finding an empty table in a cafeteria;
- Negotiating an occasional step that goes up in the home, yard, or patio in daylight or in good lighting indoors;
- Seeing furniture that has been moved into a new location in one's home or in someone else's home.

*Received 11-25 "yes" responses; at least 76 "sometimes" responses:*

- Going down curbs in daylight;
- Reading a phone book in a phone booth;
- Telling what foods are on display in a cafeteria.

*Received 11-25 "yes" responses; 51-75 "sometimes" responses:*

- Seeing skates, skateboards, and other small things left in the path of travel in daylight;
- Seeing wires or branches at head level in daylight;
- Seeing wires or branches at foot level in daylight;
- Seeing sprinklers mounted in the ground in daylight;
- Noticing stairs going down in daylight or in good lighting indoors;
- Finding the first step and walking down a flight of stairs in daylight or in good lighting indoors;
- Negotiating an occasional step that goes down in home, yard, or patio in daylight or in good lighting indoors;
- Seeing sliding glass doors;
- Seeing partly open cabinet doors or drawers at head, waist, or leg level;
- Coping with floor buttons in an elevator;
- Using the card catalog in a library;
- Taking notes or writing call numbers from a library card catalog;
- Seeing details when watching television;
- Seeing details when watching a movie;
- Getting a seam or hem straight when sewing by hand;
- Seeing a nail as it is hammered into place;
- Seeing a screw as it is turned into place;
- Seeing a saw as it cuts material;
- Restricting the use of cosmetics because of vision.

Source: Problems of Partially Sighted Persons. REHAB BRIEF: Bringing Research into Effective Focus, 1980, 3(4). Available from: National Institute of Handicapped Research, Office of Human Development Services, Department of Health, Education and Welfare, Washington, D.C. 20201.

## ASSESSING BARRIERS RELATED TO VISUAL DEMANDS

Barriers to performance for the blind and partially sighted arise primarily in the areas of making measurements, guiding materials through equipment, gaining information that is usually presented in writing or illustrations, and in telling apart items that most students discriminate by sight. The questions below will help you to find ways to overcome problems facing blind or partially sighted students. In using these questions and potential problem solutions, be sure to remember the great variation among individual students. What will work for one will not necessarily work for another. For example, jewelers loupes may help some partially sighted students, but be useless for others. Some blind students can read braille, some cannot. And so on. Therefore, individual assessment and close interdisciplinary cooperation are crucial in assessing and overcoming barriers related to visual demands.

1. *Must Measurements Be Made, Dials Set, or Meter Readings Taken?*

Students in every vocational program have occasion to set controls, make measurements, or read meters, gauges, and like devices. Such items seldom have markings that are easy to read by touch, or that are large enough to be easily read by the partially sighted.

- Select digital readout measuring instruments for partially sighted students. Multimeters, clocks, and some other instruments are available. Be sure to consider whether the controls used for adjusting the device (e.g., for multimeter range and function) are usable or can be made so.
- Provide an aid that the partially sighted student can use to read the instrument. Jewelers loupes, hand-held magnifiers, and illuminated and other stand magnifiers are all helpful for some. A "reading slit" made of black cardboard with slit through which the person reads is also sometimes helpful; these can be attached directly to many dial faces.
- Provide enlarged markings. For example, paint heavy lines around the most commonly used levels in measuring cups or graduates. Similarly, you can attach rings or strips with enlarged numerals to the face of the instrument. This works best if only a few positions must be marked. Generally, light lettering on a dark background is easier to read than the reverse.
- Choose standard items that come with markings in high relief or that are otherwise detactable by touch. For example, some timers have high relief markings and standard sewing gauges for marking tucks, pleats, and the like. Search through equipment catalogues for items that appear to be suitable. Before making a purchase, particularly an expensive one, be sure to check with a rehabilitation professional or the blind student to make sure that the markings are big enough to be read.
- Provide relief markings. Depending on the instrument, you can provide such markings by scratching indentations at key points, by attaching raised labels, or some similar device. This, of course, is effective only if a relatively few points must be marked. Choose a standard code for scratches; for example; a long scratch for half a centimeter. Make raised labels using a Dymo Tape machine or similar device. Braille Dymo Tape wheels are available as is transparent tape allowing the sighted student to read labels over which the braille labels are mounted. Alternately, if you plan only to use simple codes, a stroke "/" from a standard Dymo Tape wheel can be used for full units, for example, a dot "." for half units. You can mark some metal instruments, such as metal measuring spoons or gap gauges, with indentations in the instrument itself- consult with a rehabilitation professional if you have trouble working out a satisfactory code.
- Choose devices with position controls that can be located or set using touch or hearing. If only a few discrete settings must be made (e.g., multimeter range and function selectors, or washing machine cycle controls), choose models that have clearly audible click stops, and controls that allow the setting to be clearly determined by touch. A related strategy is to choose instruments that indicate by sound when a desired setting has been reached. For example, some torque wrenches make a click when a preset pressure has been reached, eliminating the need to read the torque setting as the bolt or sparkplug is being tightened.
- Purchase a measuring instrument specifically designed for the blind. Precision measurements usually cannot be made with improvised equipment, and precision measuring instruments for the blind have been developed for this reason. Among the tools available through the American Foundation for the Blind are: multimeters, carpenter's levels, sphygmomanometers, calipers, rulers, and micrometers. Other precision measuring instrument include: an electronic pressure gauge for use in checking a refrigeration system for gas leaks, and an audio readout dial indicator for use by machinists to determine if a lathe is rotating true, to check the size of completed parts and other tasks.
- Provide a light probe with which the blind can make readings or check the operating status of a machine. Light probes emit sounds which vary in pitch as a function of the amount of light falling upon a sensitive element in the tip. Most probes operate in one of two ways: either they respond to light supplied by the environment, or they emit a beam to reflect from the surface being examined. An example of the first mode of operation is examination of switchboard lights to see which is active. An example of the second mode is the identification of color coded containers, as different colors reflect different amounts of light. Other uses include the detection of liquid level in transparent measuring cups and the location of needles on meters and gauges...

2. *Must Controls or Other Items Be Told Apart By Low Relief Lettering, Color, or Some Other Visual Cues?*

Cases in which this is required pose particular problems for beginners. The experienced user, sighted or not, often reaches for controls without looking at them--for example, the expert typist who does not look at the keys, or the machinist who grasps a control crank without looking at it. Thus, some of the solutions suggested below may become less and less necessary as the student gains skill.

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Source: Dahl, P.R., Appleby, J.A., and Lipe, D. Mainstreaming Guidebook for Vocational Educators: Teaching the Handicapped. American Institutes for Research in the Behavioral Sciences. Salt Lake City, Utah: Olympus Publishing Co., 1978, pp.209-221.
Available from: Olympus Publishing Company, 1670 East 13th Street, Salt Lake City, Utah 84105.

- Try light probes, enlarged markings, or relief markings as discussed above according to the capabilities of the student and the demands of the equipment.
- If controls are so close together that the student frequently grasps one when reaching for another, then you can alter the controls so that the student can distinguish them by touch to detect the error and make a correction. This can be done by roughing a control with a file or substituting a knob of a different shape, size, or texture. Remember that it is not necessary to alter each control; only when controls are so positioned that they might be confused is alteration necessary.

3. *Must the Student Operate Tape Recorders, Hand Calculators, or Other Ancillary Devices While Working in the Lab or Shop?*
The main problems arise in setting controls properly and in reading the output in the case of calculators.

- Calculators. For the partially sighted, calculators with large buttons and displays may suffice. For the blind, a variety of special calculators give output in braille (either on paper tape or on a braille cell that gives the answer one symbol at a time) or audibly. The latter type, "talking calculators" have earphone jacks to avoid disturbing others working nearby.
- Tape Recorders. Special recorders with relief control markings are available. You can add Dymo Tape labels to standard recorders or other devices with large controls to achieve a similar effect. Use single, easily discriminated symbols, rather than trying to spell out the whole word to identify the control.

4. *Must the Student Read Blueprints, Diagrams, Instruction Manuals, or Other Printed Material to Perform Shop Tasks Properly?*
There are few vocational fields in which the student is not required to do one or more of these things frequently. Possible solutions to problems that arise for the blind and partially sighted are:

- Tape record instructions. This is particualrly effective if machine operation, an assembly task, or some other activity involves several steps that must be performed in a sequence that the beginner is likely to forget. Taped instructions can aid the blind person during learning just as printed instructions aid the sighted. You can do short items yourself and ask volunteer groups to do longer items--ask your local rehabilitation agency for the names of such groups.
- Enlarge instructions. Most vocational centers have facilities for making photo enlargements. Such enlargements whether compiled in notebooks, posted at the work station or put on file cards can be used by the partially sighted as tape recorded instructions are by the blind.
- Have materials brailled. Volunteer agencies that make tape usually perform this service also. They may also be able to make raised line drawings and diagrams. You or a student helper can do simple diagrams using specially designed sheets available through most organizations for the blind.
- Provide the partially sighted student with an aid to make reading of print materials easier. Magnifiers, are useful for many. Closed circuit televisions (CCTV) that greatly enlarge documents allow students to read invoices, recipes, diagrams, and other such items; attachments are available that hold a CCTV camera over a typewriter carriage to allow the typist to proof materials before they are removed.
- Provide a device that allows the blind to read inkprint. Such devices "convert" inkprint to another modality. For example, the OPTACON senses an inkprint symbol and produces a similar pattern...

5. *Is Sight Normally Involved in Positioning, Guiding, or Otherwise Using Hand Tools or Other Hand-held Objects?*
It is difficult to imagine a vocational field in which the answer to this question is "no." Fortunately, a variety of strategies exist for helping an individual to position or guide objects without sight. Some solutions to common problems that arise in this regard are:

- Select a tool or aid that eliminates the need to make fine visual discriminations. For example, self-threading needles allow the blind sewer to perform an otherwise almost impossible task. Similarly, one-handed screwdrivers allow the user to align the groove in the screw with the screwdriver blade, secure the screw to the tool, and to release it once it has been tightened into place; this is much easier than holding the screw with one hand while trying to align place and groove by touch.
- Provide a guide or template to help the student align objects properly. Drill guides can be used by students to drill at 90° angle to the board. A mitre box will help the student to make straight cuts that a sighted student may make unguided. Knives with built-in guides and other cutting guides have been developed that allow the blind to select desired food portions. You should be able to improvise similar guides for many tasks that arise in you courses or programs. Templates for check writing and for completing other forms are easy to make with an X-acto knife and a piece of cardboard. You can attach braille labels indicating the information to go in various spaces on the cardboard if the form is complex.
- Select a tool or implement that is easy to align. Many hand tools such as wrenches and spatulas, can easily be used by blind students. One factor that you should consider when making equipment purchases, however, is that hand held power tools, such as drills, are much easier to align if handles are perpendicular to the line of force than if the handles are at some other angle.

* * *

## TEACHING STRATEGIES AND ADAPTATIONS--VISUALLY IMPAIRED

A host of adaptive devices and techniques are available to assist visually impaired students in science course work and laboratories. For visually impaired students adaptations should have properties that can be collected, massed, touched, smelled, or heard, such as those found in hands-on activity. According to Benjamin Van Wagner of the University of Colorado, "We know that all students benefit from experiencing the actual item being studied or a three dimensional representation of the item. Visually impaired students need the additional multisensory, hands-on approach to teaching to provide the tactile reinforcement for the information learned from the written or auditory descriptions."

Among the recommended adaptations for visually impaired students are labeling of chemicals, equipment, and instructions in braille or raised letters. Raised line drawings of graphs, organisms, or structures can be produced on a Sewell Raised Line Drawing Kit, or on heavy aluminum foil or braille paper to substitute for the two dimensional mode. Braille rulers are also avialable for classroom use.

A cut-and-paste technique utilizing household items like buttons and macaroni is used to represent microorganisms by Kenneth S. Ricker, a visually impaired science education instructor at the University of Georgia. The advantage of this three dimensional representation is that each structure has a distinct texture and is discernible by students who are unable to use a microscope. A Thermaform or Vacuumform machine can make excellent three dimensional duplicates of such materials. Highly recommended for low-vision students are color-contrasting diagrams which allow distinctions to be easily made among different structures, organisms and the like. To reduce glare yellow or green paper should be used rather than white. Useful available devices are:

- Optacon (OPtical to TActile CONverter) which allows access to the printed page by converting it to a tactile impression
- talking calculator
- Versabraille which records audio and braille simultaneously
- Lexicon Speech Compressor which removes the spaces between words to diminish the time spent in listening.

If at all feasible, enlarging devices such as the Visualtec or Apollo Laser, should be made available because they allow visually impaired students to see materials which would otherwise be outside their range of vision. The Visualtec, for example, is a closed circuit television system, which enlarges whatever is placed in camera range. Generally used to help partially sighted individuals read by enlarging print to readable dimensions, such devices also are effective in enlarging science specimens and models, and have been successfully used during dissections. In addition to a stationary system, a portable model is available for students to take from class to class and into the laboratory.

Many modifications make computer sciences available to visually impaired students. Braille computer terminals make the courses and careers in computer science accessible to those visually impaired students who have extremely low vision or who are totally blind. These terminals typically produce output in braille rather than print. An audio response terminal system has been developed as well. Such adaptations are generally made on an individual basis. The Optacon also can be used to convert the usual computer printout to tactile impressions. For those students who have some limited vision, a Visualtec, Apollo Laser, or other enlarging device can be used for effective reading of the computer display screen as well as the printout.

Visually impaired students have been excluded from science laboratories primarily for reasons of safety and the inability to "read" laboratory instruments. Braille labeling is one method to assure laboratory accessibility, and others are being developed. For example, the New Jersey Institute of Technology has developed inexpensive, easily removed devices which, when attached to equipment such as balances or spectrometers, convert the usual visual signals to signals discernible by a nonvisual sense. One such device is attached to a balance which allows the student to determine whether the weight in one pan is greater than, less than, or equal to the weight in the other, by means of an audible tone with variable pitch. This system points up an axiom regarding accommodations in the laboratory for students who are visually impaired: whenever possible, substitute sound or tactile cues for visual cues.

Regarding safety in the laboratory, most visually impaired students are well aware of the need for care and may be able to suggest some excellent ways to promote safety as they proceed in laboratory work. Some suggestions for laboratory safety may include use of gloves when handling toxic materials, a plastic coated safety bottle with nondrip pouring spout, and an automatic pipette. Such devices are commercially available and are used in many laboratories where there are no disabled students.

Many of the devices described in this section are available from state departments of rehabilitation and private or federal agencies. Check with local organizations, including those which deal specifically with the blind or visually impaired.

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Source: Simpson, S. Careers in Science: A Guide for the Counselors, Teachers, and Parents of Students with Disabilities. University of California, Irvine: Career Planning and Placement Center, 1981, p.14.
Available from: University of California, Irvine, Career Planning and Placement Center, Irvine, CA 92717.

Supported by funds from the National Science Foundation, this guide presents information on career counseling, attitudes, career awareness, adaptive devices, teaching strategies, and the legal rights of the disabled in an effort to encourage disabled students to participate in science careers. The primary focus is on hearing, mobility, and visual impairments, but many of the ideas are applicable to other handicaps. Includes profiles and comments of successful handicapped scientists.

# TIPS FOR TEACHING VISUALLY IMPAIRED STUDENTS

## General Guidelines[1]

- Do not raise your voice. The blind are not hearing impaired.
- Speak directly to the blind person, not to a third party.
- When talking to a blind person, use the words you normally use. Do not try to avoid words like "look" and "see," which are part of everyone's vocabulary, including the blind person's.
- If discussing a form or passing out materials, describe these to the visually impaired.
- When teaching or explaining something to a blind person, be consistent in your directions since he or she cannot watch what you are doing. Explain fully and, whenever possible, let the sense of touch substitute vision.
- Say what you are doing when you demonstrate. Check your terms to avoid abstractness (e.g., "This fastens here").
- Make clear how similar parts or processes can be distinguished by touch or sound.
- Make sure that you say everything that you write on the blackboard.
- Encourage sighted classmates to be helpful but not to do the student's work.
- Seat the visually impaired student in a position where he/she can hear you clearly and has adequate lighting.
- Be sure to provide the student with an opportunity for adequate exploration of the classroom or work area and any tools or equipment. Often blind students will wish to get a general impression of an area or object, followed by detailed explanation of specific portions of the area or object. Keep the students informed of any changes in arrangements of furniture or equipment.

## Materials and Equipment[2]

- Braille and large print textbooks. Many textbooks are available both in Braille and large print; material that is not already available can be transcribed free by volunteer service groups.
- Slate and stylus; Braille writer. The slate and stylus allow the visually handicapped student to jot down short notes in Braille, but are not suitable for manuscript writing; the Braille writer, on the other hand, has levers that operate manually to produce Braille on plastic sheets much as a typewriter produces typed copy.
- Audio aids. Cassettes and recorders are basic tools for the visually handicapped; recordings enable a student to keep a verbal record of most material presented to sighted students in printed form.
- Closed circuit television (CCTV) and other magnifying aids. CCTV is used primarily for magnifying print for persons with low vision. Other magnifiers of glass or plastic can be used to view objects as well as for reading material.
- Abacus and talking calculator. The abacus has long been used by visually handicapped persons for making mathematical calculations. However, several calculators with audible output are now available and can greatly aid the visually handicapped in jobs requiring mixed mathematical calculations.
- Electronic reading aids. The Optacon and Stereotoner are devices that enable blind persons to read standard ink print; each has a small probe that passes over ink print, converting it to tactile images in the case of the Optacon, and to auditory tones in the case of the Stereotoner and, although they are not expensive, these devices and more advanced aids like the Kurzweil Reading Machine should substantially increase the employment potential of the visually handicapped.
- Travel aids and electronic environment sensors. The long cane aids safe and efficient travel by enabling the trained user to locate travel landmarks and identify hazards in the path. Electronic environmental sensors such as the Mowat Sensor, the Nottingham Obstacle Detector, the Laser Cane and a sonic guide work by emitting ultrasonic signals that bounce off objects in the environment, helping the blind traveler to identify obstacles and/or shapes.
- Special vocational aids. The Annual Catalog of Aids and Appliances for Blind and Visually Impaired Persons, distributed by the American Foundation for the Blind, contains a section on vocational aids including specialized writing and drawing aids; soldering irons, wrenches, screwdrivers; and Braille rulers, tapes, squares, and marking gauges.
- The desk. If possible, the student should be provided with a movable desk that can be adjusted for height, position, and angle. For instance, it may be advisable to raise the desk for a student who must constantly lean over the desk in order to use residual vision. The angle of the desk has to be taken into consideration in solving problems of sensitivity to glare and in providing maximum, evenly distributed light. It is best to provide a desk of light, neutral color, with a dull finish. Portable, adjustable book stands may be helpful also.
- Safety factors. The instructor may be apprenehsive about visually handicapped students' using special equipment. Fears will probably center on doubts about the students' ability to use tools, machines, etc., without personal injury or damage to the equipment. However, once students have learned the tool or machine--handled it, felt, it, been shown its use, and committed this knowledge to memory--they can use many machines with acceptable accuracy. Note that it may be necessary to adapt machines to make this possible. For example, depth of cut on a lathe can readily be set once raised bumps or markers have been added to the calibrated dial on the cutting tool feed crank. Additional factors to consider are: (a) obstructions or changes in the room; (b) inappropriate or inadequate safeguards on machines; (c) noise that masks a hazard; and (d) undue glare and shadow effects that mask a hazard.

* * *

[1]Source: Dahl, P. R., Appleby, J. A., and Lipe, D. Mainstreaming Guidebook for Vocational Educators: Teaching the Handicapped. Salt Lake City, Utah: Olympus Publishing Co., 1978.

[2]Source: Dillman, C. M. & Maloney, P. "Visually Handicapped Students." In R. Weisgerber (Ed.), Vocational Education Teaching the Handicapped in Regular Classes. Reston, VA: Council for Exceptional Children, 1978, pp. 44-5.
Available from: Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

# Expanded Services to Visually Impaired And Learning Disabled Students

Kathryn Fosegan

In October of 1980, the Reading and Study Skills Center at the Agricultural and Technical College at Alfred, under the direction of Grace Barton, Director of the Center for Developmental Studies, received a vocational education grant entitled "Improved Program Access for Visually Impaired and/or Learning Disabled Students." The primary objectives of the grant were to purchase equipment to assist visually impaired students with their course work and to hire a coordinator to provide individual assistance to both visually handicapped and learning disabled students. Both objectives were achieved by January of 1981, and the real work was begun--provision of individual academic skills assistance to these students.

A learning disabilities identification/referral system has been initiated; initial contact has been made with pre-identified disabled students as well as with faculty-referred disabled students, and individual assistance is being provided to 28 of the identified students on a regular basis. We anticipate even more students with the beginning of the academic year.

Equipment purchased with project funds include several useful aids for visually impaired students. The Visualtek Read-Write system is a video aid which allows people with low vision to read and write independently. The system utilizes a television monitor, a camera, and a high magnification lens. Anything placed under the camera, such as a textbook, newspaper article, etc., appears on the monitor enlarged and sharply defined up to sixty times magnification. Also a student can place a paper and pen on the table under the camera to write his/her own assignment which will be enlarged on the monitor.

Another component of the Visualtek system is a microfiche reader, which allows a partially sighted student to obtain the same image from microfiche that standard readers provide from ordinary print.

Using a funded typewriter, a student is able to make a simple mirror adjustment on the Visualtek camera and type papers or reports, which will project on the monitor. Another possibility is faculty and staff use of the typewriter. An easily installed large print element will allow anyone to prepare materials for students with a visual handicap.

Lastly, with the assistance of our campus 504 Coordinator, we were able to adapt the Visualtek camera to accommodate a computer terminal, whose image is enlarged on the TV monitor. Since the majority of our students have some computer course work, this equipment modification is particularly exciting.

Other available aids include hand-held magnifiers, desk magnifiers, braille slates, and a speech calculator. The calculator is identical to a regular 7" x 5" machine with one significant difference--a speech component. By depressing a button, the calculator will say what is being programmed. The calculator is easily portable and can be borrowed from the Reading Center on a sign-out basis.

With the cooperation and assistance of the library staff, all equipment and aids are available up to eighty (80) hours a week. The library and Reading Center staffs schedule instruction time on the use of equipment with any interested people--students, faculty, staff, or community residents.

A continuation project proposal has been approved for 1981-82, which will allow us to continue the work we have begun and to refine and expand our present identification/referral system. Our aim is to reach disabled students and assist them in achieving their academic goals more easily with assistance from the Center for Developmental Studies and other support services.

Certainly, the retention of students with disabilities is improved greatly by a special program such as this which offers much-needed special equipment, strong support and assistance.

* * *

Kathryn Fosegan is Project Coordinator at the Agricultural and Technical College at Alfred for the vocational education grant that funded this special assistance for visually and learning disabled students.

Source: Fosegan, K. Expanded Services to Visually Impaired and Learning Disabled Students. SUNY Retention Newsletter, October 1981.
Available from: Office of Educational Services, State University of New York, State University Plaza, Albany, NY 12246.

## SAMPLE STUDENT AGREEMENT FOR TAPING LECTURES

DISABLED STUDENT SERVICES

SAN FRANCISCO STATE UNIVERSITY

In the "Rules and Regulations" outlining procedures for compliance with Section 504 of the Rehabilitation Act of 1973 (Nondiscrimination On the Basis of Handicap), it is stated, in the HEW Regulations, § 84. 44 (B), "a recipient to which this subpart applies (S.F.S.U.) may not impose upon handicapped students . . . rules such as the prohibition of tape recorders (or braillers) in classrooms . . . that have the effect of limiting the participation of handicapped students in the recipient's (S.F.S.U.) education program or activity."

Some professors may later want to copyright lectures and therefore are concerned about allowing students to tape record their lectures. This problem can be solved by the student's completing the following agreement:

I, _____, agree that I will not release
name of student

the tape recording or transcription or otherwise hinder _____
professor's name

ability to obtain a copyright on lectures I have taped in _____
dept., course # and title

_____ _____
student signature date

The student gives this to the professor upon completion.

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Source: Smith, L.M. The College Student with a Disability: A Faculty Handbook. Washington, D.C.: U.S. Government Printing Office, 1980, p.30.
Available from: The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

This book, while primarily a reference for faculty, contains good ideas for modifications and adaptations that can be used within classrooms by students with varying disabilities.

# Speech Impaired Students

Speech impairments may be congenital or the result of illness or injury. They may be found alone or in combination with other disabilities. In any case, the college student with a speech impairment (unless it has been recently acquired) will probably have received some speech therapy.

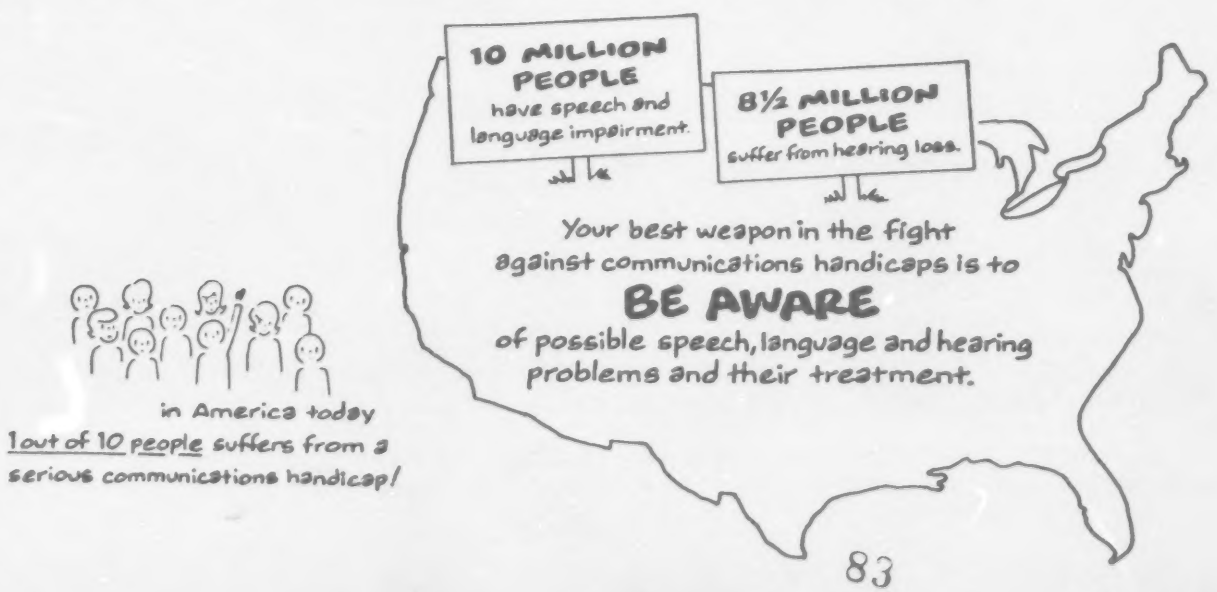
Impairments range from problems with articulation or voice strength to being totally non-vocal. They include stuttering (repetition, blocks, and/or prolongations occasionally accompanied by distorted movements and facial expressions), chronic hoarseness (dysphonia), difficulty in evoking an appropriate word or term (nominal aphasia) and esophageal speech (resulting from a Laryngectomy).

Many speech impaired students will be hesitant about participating in activities that require speaking. Even if the student has adjusted well to a speech impairment, new situations may aggrevate old anxieties. It is important that self-expression be encouraged, but pressure to speak is not apt to be helpful. It is important to allow time for the speech impaired student to express himself or herself so that confidence can be gained. Speaking in front of a group can be an agonizing experience for anyone—the speech impaired student is no exception. It is also important for the instructor to accept and respond to all appropriate attempts at communication. When speaking to a speech impaired person, continue to talk naturally. Resist the temptation to complete words or phrases for a speech impaired person.

For persons who cannot speak and who are otherwise physically disabled so that they cannot sign, write, or type, various communication aids are available. These aids may range from sophisticated electronic "speaking" machines activated by punching a keyboard with a Head Pointer or Mouth Wand to a spelling board that consists of a layout of the alphabet, a few common words and phrases, yes and no, to which the speech impaired person points and an assistant may speak out loud. Some devices provide a "ticker tape" print-out or display the message on a calculator-like screen across which the characters move. With some less portable devices, the message is displayed on a TV screen.

Depending on the severity of the impairment, various adapted methods may be required for the speech impaired student. Many of the adapted methods for evaluation suggested for other disabilities will be appropriate for the speech impaired student. Some speech impaired students will require no adapted methods at all. Most will need patience, encouragement, and an opportunity to develop self-confidence in an unfamiliar group. The instructor can set the tone that encourages appropriate self-expression.

Source: Smith, L.M. The College Student with a Disability: A Faculty Handbook. Washington, D.C.: President's Committee on Employment of the Handicapped, 1980, p.13.
Available from: President's Committee on Employment of the Handicapped, Washington, D.C. 20201.


10 MILLION PEOPLE
have speech and language impairment.
8½ MILLION PEOPLE
suffer from hearing loss.
Your best weapon in the fight against communications handicaps is to
BE AWARE
of possible speech, language and hearing problems and their treatment.
in America today
1 out of 10 people suffers from a serious communications handicap!

## UNDERSTANDING STUDENTS WITH SPEECH AND LANGUAGE DISORDERS

Speech is one of our most personal attributes. Having a speech handicap can be socially embarrassing and humiliating. Knowing that people respond more to the sound of speech than to the content of communication can cause a person to be inhibited or withdraw into a world of silence. The social implications of this handicap are so closely interrelated with the handicap itself that a speech impairment is defined as any condition that results in speech that draws unfavorable attention to itself.

The 1976 report of the National Advisory Committee on the Handicapped estimates that there are some 2,293,000 speech impaired persons of school age. Many people think that speech impaired students are not badly off and will eventually grow out of their impairments. Whether a student can overcome a speech impairment depends on the cause of the problem. In any case, speech impaired students will experience failure and frustration in their attempts to communicate. A stutterer who was trying to find a job explained:

> *Every time I'd ask for a job a funny look would come over their face and some of them would say no right away even before I finished what I was going to say. Some of the others, and one of them was a stutterer too, just waited til I finally got it out and then they would shake their heads. One storekeeper was so sympathetic I could hardly get out of there fast enough.* (Van Riper, 1963, p.42)

### Types of Speech Impairment

The main types of speech impairments are articulation disorders, rhythm disorders, voice disorders, and language disorders. Many students with communication problems have a combination of these speech disorders.

- Articulation disorders. These consist of (a) substitution, e.g., th for s; (b) omissions, the dropping of consonants from the ending, beginning, or middle of words, (c) distortions, often of the sound of s; (d) additions, e.g., saying sumber for summer. About 80% of the cases seen by speech correctionists are articulatory disorders. Baby talk and lisping are common examples of this type of speech impairment.

- Rhythm disorders. Normal speech is rhythmic and sequential. When the timing of speech is so far off the standard that it is conspicuous or unpleasant, the speaker is said to have a disorder of rhythm. The most common examples of this are stuttering and cluttering. Stuttering is a pattern of speaking broken by excessive prolongations or repetitions of sounds, syllables, words, or parts of sentences. Self consciousness often accompanies stuttering and makes it more pronounced. Cluttering is a speech disorder characterized by excessive speed, disorganized sentence structure, and slurred sounds. The cluttered speaker may not be aware of having a speech pattern that is difficult to understand or annoying to others.

- Voice disorders. Voice disorders, not as common as articulatory disorders, appear mostly in connection with (a) vocal quality, (b) vocal pitch, and (c) vocal loudness. Vocalization can vary in pitch, loudness, flexibility, and quality. The speech produced may be too monotonous, breathy, harsh, or hoarse.

- Language disorders. Symbolization, or language disorders, are serious problems in speaking, reading, and writing. The person with such a problem (dysphasia) may have delayed speech, substitute one word for another, or speak in nonsense syllables. The person is aware of not saying what was intended, but is unable to make the right words come out. Students with dysphasia may be incorrectly diagnosed as mentally retarded.

### Causes of Speech Impairment

Multiple speech disorders may result from a number of causes.

- Speech deficits associated with brain damage. Cerbral palsy and aphasia are conditions in which brain damage is associated with speech deficits. A student with brain damage may have multiple speech defects.

- Speech deficits associated with hearing loss. Studies of speech handicapped students have shown a high correspondence with hearing loss. The speech of a student with a significant hearing impairment may be characterized by several types of defect. First, the pupil may exhibit voice disorders such as speaking loudly or too softly. If severely hard of hearing, the person may pitch the voice high and speak without intonation. Second, the speech may show many errors of articulation: sounds that are unvoiced and are of a high frequency (s, f, p, t, and sh) are most likely to be misarticulated.

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Source: Maloney, P. Students with Communication Disorders. In R. Weisgerber (Ed.), Vocational Education: Teaching the Handicapped in Regular Classes. Reston, Virginia: Council for Exceptional Children, 1978, pp.69-71, 76-7.
Available from: Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

This publication is designed to familiarize vocational educators with federal policy and program support for handicapped students. It is divided into four sections which address specific problems of learners who are orthopedically, visually, mentally, and communication impaired.

- Cleft palate or cleft lip. A structural defect in the palate or roof of the mouth is commonly called a cleft palate. This defect makes it difficult or impossible for the individual to close off the nasal passage for proper articulation. The speech of a person with an unrepaired cleft palate may be hypernasal as a result of too much air escaping through the nose as the person talks. Cleft lip (incorrectly called "harelip") is a structural defect in the upper lip. It can cause defective speech if [illegible] unrepaired.

Capabilities and Limitations in the Classroom

Communication impairment can affect a student's performance in the classroom in a number of ways. Language is one of the most complex human skills and most language is acquired through hearing the language spoken by others. There are four main consequences of being excluded from an environment in which language is assimilated through sound: (1) The student's vocabulary probably will be limited; (2) The student's specific language patterns probably will be distorted and/or low level; (3) The student's thinking skills probably will show lack of sophistication; and (4) There probably will be subsequent reading difficulties. Knowledge of the individual student's achieved reading level is important to the vocational educator for planning purposes. The speech impaired student also may have a reading deficit.

Communication impaired students are likely to have underdeveloped social skills. This is not due to lack of potential but to lack of experience in social interaction. Their range of social experience is likely to be much more limited than that of classmates simply because most people rely heavily on oral language in social interaction, whereas the communication impaired student cannot.

The speech impaired student's difficulty with self expression draws immediate and often unfavorable attention from others. The student may concentrate more on how to say something than on what to say. The speech impaired student may avoid social situations that require speaking, and when asked to speak, may seek ways to avoid it.

In teaching, specific techniques can be used to make it easier for the communication impaired student to function successfully in the classroom. They are simple things, not necessarily different from the way one approaches teaching a nonhandicapped student, but they should not be overlooked. In addition to adopting a positive manner the instructor should:

- Look at the student when the student is talking.
- Wait until the student is through talking, rather than interrupt and try to finish for the pupil.
- Ensure a climate of acceptance without ridicule.
- Encourage speech.
- Make lists of words the pupil has difficulty saying but which are important for the vocational area.
- Control facial expressions and avoid displaying disturbance at the student's speech.

To assess the communication impaired student's progress, the teacher should judge the student on individual merits, not in comparison to the rest of the class.

While assessing the student's performance, the teacher might ask the following questions:

- Is more background information needed?
- Is there a specific unresolved problem?
- Can the educator and the student communicate comfortably with one another?

* * *

## TIPS FOR TEACHING THE SPEECH IMPAIRED

- Encourage the student to clarify meanings through the use of gestures or other expressive techniques. Focus attention broadly, rather than narrowly, when the person speaks in order that these "helps" are not wasted.

- Await the completion of the sentence. Don't interrupt and attempt to anticipate the remainder of the thought.

- Place the handicapped person near the instructor in the training setting to reduce the need for loud speech.

- Consider using a mechanical or electronic aid (voice amplifier) to provide communication if the speech impairment is serious and the student's expression borders on the unintelligible.

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Source: Weisgerber, R., Dahl, P., and Appleby, J. Training the Handicapped for Productive Employment. Maryland: Aspen Publication, 1980, p. 235. Available from: Aspen Systems Corporation, 1600 Research Boulevard, Rockville, MD 20850.

Source: A Guide to College/Career Programs for Deaf Students. Prepared by Gallaudet College and NTID, 1978, p.67. Photo by Arthur Jillette, New Hampshire Vocational Education College.

# UNDERSTANDING STUDENTS WITH HEARING IMPAIRMENTS

Patricia Maloney

## The Educator, the Student, and the Task

Hearing impaired individuals are divided commonly into two groups: (a) the deaf, whose sense of hearing is nonfunctional, and (b) the hard of hearing, whose sense of hearing is limited. The Report of the Ad Hoc Committee to Define Deaf and Hard of Hearing (1975) defines the two terms as follows:

- A deaf person is one whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid.
- A hard of hearing person is one who, generally with the use of a hearing aid, has residual hearing sufficient to enable successful processing of linguistic information through audition.

In its 1976 report to the US Office of Education, the National Advisory Committee on the Handicapped estimated that there are 49,000 school age deaf students and 328,000 hard of hearing students. The difference between the two groups is an imporatnt one in terms of how the student learns and responds to instruction. Many people assume that any hearing loss means deafness; they make little or no effort to converse with such handicapped persons. Actually, a person with a moderate hearing loss needs to be encouraged to use residual hearing.

Hearing loss is commonly measured by an audiometer according to international standards. The loss may be conductive or sensory neural. If it is conductive, a hearing aid to increase the volume of sound will probably be helpful; if sensory neural, the loss is not one of volume of sound but of high frequency ranges, in which case a hearing aid may not be particularly helpful. The classification of hearing loss ranges from slight in which the person may have difficulty hearing faint or distant speech, to extreme, in which some loud sounds may be heard but the individual relies primarily on vibrations and vision as a means of receiving communication.

It is important to know the degree of hearing loss a student has in order to teach the student effectively. The time of onset of the hearing loss is also important in understanding the student. If a person has acquired speech before the loss of hearing, the whole communication process is likely to be different from that used by persons who have never known speech and language.

A person who has become hearing impaired during childhood or later may have trouble with speech, but at least has some knowledge of spoken language. The person who has been deaf since birth has never heard a spoken word and knowledge of language and speech is severely limited.

> The major educational problem of a child who has been deaf since birth is not the lack of hearing itself, but the inability to develop speech and language naturally.

The communication impaired student relies on several means of communication, depending on the impairment. It is important that the educator be familiar with the student's optimum means for communicating. A hearing aid is often worn by a person with a hearing loss. A hearing aid is a miniature amplifying system tnat increases the volume of sound to the user's ear. The system begins with a pickup microphone that responds with harmonious physical movement to the sound that strikes it. The movement is changed to electrical variations and the variations are amplified and then translated by loudspeaker components into physical movements that carry to the listener by a custom fitted mold worn in the ear. A hearing aid does not completely eliminate the problems associated with hearing loss and is useful only to the person who can benefit from the amplification of the sound. The primary beneficiaries are those persons with conductive hearing loss.

Communication with students wearing hearing aids can be facilitated in three ways:

- The speaker should stand close to the student. Hearing aids have a limited range of pickup.
- Nonauditory cues, such as hand gestures and facial expressions, should be used to emphasize the spoken content of the message.
- Extraneous background noises should be controlled and diminished as much as possible; noise is the archenemy of hearing aid users because the hearing aid amplifies sounds indiscriminately.

In a sensory neural type of loss, the nerve structures of the inner ear have been damaged and sound is usually perceived with less than normal loudness; the sounds are also less clear. Increasing the volume of sound does not help to make the speech less distorted. The person with a sensory neural hearing loss may not be able to discriminate among words like mass, math, mat, and map, even with an adequate hearing aid in place.

The greater the hearing loss, the more the student is completely dependent on visual clues. Students with hearing losses might rely on an alternative communication system. These systems include the following:

- *Speech Reading.* Some hearing impaired students can speech read, that is, read lips. The speech reader learns to interpret the facial and lip movements of the speaker to sharpen his or her understanding of what is being said. The student with a moderate hearing impairment combines auditory clues with speech reading to receive a great deal of information.

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Source: Maloney, P. Students with Communication Disorders. In R. Weisgerber (Ed.), Vocational Education: Teaching the Handicapped in Regular Classes. Reston, Virginia: Council for Exceptional Children, 1978, pp.69-71, 76-7.
Available from: Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

The student with a severe hearing loss and minimal auditory input may be forced to rely more heavily on interpreting visual clues given by the speaker, but this student is not necessarily a better speech reader.

- *Fingerspelling.* This system of manual communication uses fixed positions of the hand for each letter of the alphabet.

- *Sign Language.* This type of manual communication consists of formalized movements of the hands, arms, and body to express words and concept. Fingerspelling and sign language are both used by hearing impaired individuals who rely on manual communication to express themselves.

- *Total Communication.* Total communication, a designation for the simultaneous use of all available methods, is officially defined by the Conference of Executives of American Schools for the Deaf as follows:
*Total Communication is a philosophy requiring the incorporation of appropriate aural, manual, and oral modes of communication in order to ensure effective communication with and among hearing impaired persons.* (Brill, 1976, p. 358).

Overcoming Problems

*Unnecessary Dependency.* Once they have accepted a communication impaired student, friends and instructors may tend to "spoon feed," or do everything for the person. People do not realize that in giving unnecessary help they impede the development of the communication impaired student. Achieving the greatest possible self reliance should be a major goal for communication impaired students. The student's only handicap should be the communication impairment, not lowered expectations nor social rejection.

*Being Overlooked.* It is easy to forget that the hearing impaired student does not hear the daily announcements over the public address system. Announcements should be repeated or written down. This also holds true for class announcements.

*Poor Vocabulary.* The communication impaired student often has a lower level of vocabulary than that of classmates. The instructor can help the student to build vocabulary by providing study lists of key words.

*Understanding Speech.* If the hearing impaired student is having a difficult time adjusting to the class, it might be wise to use an interpreter. The interpreter speaks the language and can be a great help in transmitting course content. Gaps in communication are bound to occur. Some strategies for compensating for this include:

- *The buddy system.* No matter how bright or diligent, the hearing impaired student will not be able to understand everything that is going on. The handicapped student must often make an extra effort and fatigue alone could affect efficiency. A buddy is a classmate who can help the communication impaired student with directions missed or with what is happening (especially during group discussions).
- *Duplicate notetaking.* A classmate can help the hearing impaired student by making a duplicate copy of the day's notes. This can be accomplished easily with carbon paper. The hearing impaired student can then attend to other visual details and cues that would otherwise be missed. Having an extra copy of the day's notes is a safeguard against the student missing out on the lesson. Duplicate notetaking also increases the interaction between the communication impaired student and other students.
- *Temporary helpers.* Also helpful are tutors, interpreters, and counselors. If these services are needed and the school cannot provide them, special vocational education funds should be requested. If these are unavailable, the department of rehabilitation's local office can be contacted.

Methodology

In teaching, specific techniques can be used to make it easier for the communication impaired student to function successfully in the classroom. They are simple things, not necessarily different from the way one approaches teaching a nonhandicapped student, but they should not be overlooked.

For example, it is important in teaching the deaf or hard of hearing to (a) keep within close range when speaking to the student, and (b) always face the student when speaking.

The teacher should also:

- Check that the student is paying attention (not just "listening").
- Use many visual aids and supplementary written materials.
- Write on the board without speaking, then turn back to the class and speak.
- Articulate clearly and at normal speed.
- Stand still when talking.
- Provide outlines and vocabulary lists for any complicated topic being discussed.
- Rephrase sentences if the student does not seem to understand.
- Seat the student advantageously for group discussions.

* * *

## DEGREE OF HEARING LOSS

| | Average of the Speech Frequencies in Better Ear* | Effect of Hearing Loss on the Understanding of Language and Speech | Educational Needs and Programs |
|---|---|---|---|
| Slight Hearing Loss | 27 to 40 dB (ISO)<br><br>20 dB or less | -May have difficulty hearing faint or distant speech<br>-May experience some difficulty with the language arts subjects<br>-Generally unnoticed | -May need attention to vocabulary development<br>-May benefit from hearing aid<br>-Needs favorable seating and lighting<br>-May need lipreading instructions<br>-May need speech therapy |
| Mild Hearing Loss | 41 to 55 dB (ISO)<br><br>20-40 dB | -Understands conversational speech at a distance of 3-5 feet (face to face)<br>-May miss as much as 50% of class discussions if voices are faint or not in line of vision<br>-May have slightly limited vocabulary<br>-Difficulty when tired or inattentive, in distant theater seats, in noise of general conversation | -Individual hearing aid by evaluation & training in its use<br>-Favorable seating and possible special class placement<br>-Attention to vocabulary and reading<br>-Lipreading instruction<br>-Speech conversation and correction, if indicated |
| Moderate Hearing Loss | 56 to 70 dB (ISO)<br><br>46-60 dB | -Conversation must be loud to be understood<br>-Will have increased difficulty in group discussions<br>-Is likely to have defective speech<br>-Is likely to be deficient in language usage and comprehension<br>-Will have limited vocabulary | -Special help in language skills, vocabulary development, usage, reading, writing, grammar, etc.<br>-Individual hearing aid by evaluation & auditory training<br>-Lipreading instruction<br>-Speech conversation and correction<br>-Attention to auditory & visual situations at all times |
| Severe Hearing Loss | 71 to 90 dB (ISO)<br><br>60-80 dB | -May hear loud voices about 1 ft. from ear to moderate voice several inches from ear<br>-May be able to identify environmental sounds such as sirens and airplanes<br>-May be able to discriminate vowels but not all consonants<br>-Speech & language defective and likely to deteriorate | -Emphasis on language skills, concept development, lipreading and speech<br>-Program needs specialized supervision and comprehensive supporting services<br>-Individual hearing aid by evaluation<br>-Auditory training with individual and group aids |
| Profound Hearing Loss | 91 dB or more (ISO)<br><br>Over 80 dB | -May hear some loud sounds about 1 inch from ear but is aware of vibrations more than tonal pattern<br>-Relies on vision rather than hearing as primary avenue for communication<br>-Speech and language defective and likely to deteriorate | -Emphasis on all language skills, concept development, lipreading and speech<br>-Program needs specialized supervision and comprehensive supporting services<br>-Continuous appraisal of needs in regard to oral and manual communication<br>-Auditory training with group and individual aids |

*Note: First decibel rating is based on current ISO standard (International Standard Organization). Second decibel rating is based on information from U.S. Department of Labor, Manpower Administration, 1971.

Source: Davis, K. It's About Time...Hearing Impairments Came Out Into the Open. University of Wisconsin, Madison: Wisconsin Vocational Studies Center, 1976, pp.2-3.
Available from: Wisconsin Vocational Studies Center, University of Wisconsin, Madison, 964 Educational Sciences Building, 1025 W. Johnson Street, Madison, Wisconsin 53706.

Written for vocational educators, the booklets in this series cover the following topics: Alcohol Abuse, Drug Abuse, Emotional Disturbance, Hearing Impairment, Learning Disabilities, Mental Retardation, Physical Disabilities (Part I, II, and III), Speech/Language Disabilities, and Visual Impairment.

# How will I communicate with a deaf person?

Will he or she be able to understand me? Will I understand what is going on? These are just a few of the questions frequently asked by hearing people regarding communication with a deaf person.

Communicating with a deaf person is not necessarily hard or easy; there is no formula for success since two individuals are involved and the circumstances will always be different.

There is, however, basic knowledge which should enhance communication.

The deaf person develops his or her communication abilities according to various influences. Intelligence, personality, family environment, age of onset of deafness, degree and type of deafness, language background, residual hearing (many deaf persons have *some* hearing), listening skills, lipreading and speech abilities and educational background – all vary with each deaf person, just as the personalities and skills of every person vary.

So all deaf people will communicate in a different way at different levels of understandability to you. Some will use speech only; some will use a combination of sign language, fingerspelling and speech; some will write; some will use body language and facial expression to supplement their interactions. In any case, deaf people will usually use many ways to convey an idea to another person and will be more than willing to facilitate communication.

You, as a hearing person, may have apprehensions about meeting a deaf person. Don't worry; your concerns are natural. Remember, we all feel uncomfortable in unfamiliar situations.

The key is to find out which combination of techniques works best to communicate with a particular deaf person. You will have to experiment and try any of several different communication techniques. It will depend on what you feel comfortable with and what works. The important thing is not *how* you exchange ideas or feelings, but that you *communicate*.

## Communication Tips

In addition to understanding the uniqueness of each deaf person's skills in all aspects of communication, there are a few specific techniques that can be helpful.

### *One-to-One Communication*

1. Get the deaf person's attention before speaking. Since deaf people can't hear the usual call to attention, they may need a tap on the shoulder, a wave or other visual signal to gain attention.

2. Speak slowly and clearly; but exaggeration and over-emphasis of words distort lip movements, making speechreading more difficult. Speechreading is a skill not all deaf persons have. Only 26 percent of speech is visible on the lips, and even the best speechreaders can't read everything, although they can pick up contextual clues to fill in some of the gaps.

3. Look directly at the person when you speak. Even a slight turn of your head can obscure the deaf person's view. Other distracting factors affecting communication include moustaches obscuring the lips, distracting habits such as smoking, pencil-chewing and putting your hands in front of your face.

4. Don't be embarrassed about communicating via paper and pencil. Getting the message across is more important than the medium used.

5. Try to maintain eye contact with the deaf person. Eye contact helps convey the feeling of direct communication. If an interpreter is present, continue to talk directly to the deaf person who can turn to the interpreter if the need arises.

6. If you are having some difficulty getting an idea across, try to re-phrase a thought, or re-state a sentence, rather than repeating exactly the same words. Sometimes a particular group of lip movements is difficult to speechread.

7. Use pantomime, body language, and facial expression to help communicate.

### *Group Situations and Meetings*

These tips are useful for a deaf employee and have also proven to be helpful for hearing employees as well; since they are essentially modifications of any good group procedures.

1. Seat the deaf person to his/her best advantage. This usually means a seat near the speaker where the deaf person can see the speaker's face.

2. Try to avoid standing in front of a light source, such as a window. The bright background and shadows created on the face make it almost impossible to speechread.

3. Aid the deaf person in following a lecture, movie, or filmstrip by providing a brief outline or script printout. This can be provided in advance or accompanied by lighting for the deaf person.

4. In a training situation, try to provide new vocabulary in advance. It is almost impossible to speechread unfamiliar words.

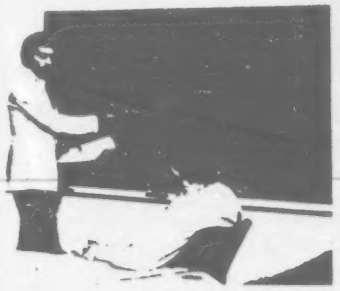
5. Use visual aids. They can be a tremendous help to deaf persons. Vision is a deaf person's primary channel for receiving information. Make full use of overhead projectors, chalkboards, films, diagrams, charts and other visual media where appropriate.

6. Try to avoid unnecessary pacing and speaking while writing on the chalkboard or lecturing. It is difficult to speechread a person in motion and impossible from the side or from the back.

7. Slow down the pace of communication slightly. This often helps to facilitate understanding. Many speakers tend to talk too fast. Try to allow a little extra time for the deaf person to assimilate the information and respond.

8. Make sure the deaf person is not left out when vital information is presented. Write out any changes in meeting times, special arrangements, additional instructions. Allow extra time when pointing out the location of materials, referring to manuals and other media, because the deaf person must look, then return attention for further instruction.

9. Repeat questions or statements from the back of the room. Deaf persons are cut off from whatever is not in their visual area. Since it is often necessary to know the question in order to fully understand the answer, questions or statements should be repeated.



*Face the deaf person. Do not speak while writing on the chalkboard.*

*Use a written message if needed.*

**National Technical Institute for the Deaf**
**Rochester Institute of Technology**

Public Information Office
One Lomb Memorial Drive
Rochester, New York 14623

# THE DEAF STUDENT IN YOUR CLASSROOM: SUGGESTIONS

Ralph Szweda, Professor
Monroe Community College

1. Don't allow yourself to be distracted by the presence of his interpreter in your lecture/lab.

2. Your students will initially be fascinated and perhaps distracted by the finger (manual) communication performed by the interpreter. They tend to focus on that process rather than you. The novelty will soon wear off.

3. Pace your lecture to allow time for the interpreter to perform the translation. Don't stop talking, just slow down.

4. Ask a student in the class to take notes for the deaf student. (There is NCR paper (carbon sets) available from the Counseling Center.) You may have to ask more than once. So don't be shy. The deaf student cannot take notes and pay attention to his/her interpreter as well.

5. When you distribute handouts, be certain to include the interpreter in your distribution pattern. The availability of such materials facilitates the translation process.

6. Don't be surprised if the translator asks a question about the subject matter. He/she is simply communicating the student's question.

7. Don't be afraid to use the interpreter to communicate your thoughts and ideas to the deaf student via the interpreter either before or after class. But in doing so, don't leave the deaf student out of the conversation. Conduct the conversation in the same manner as you would with "hearing" persons.

8. Don't be afraid to ask the deaf student if he/she understands your explanation, instructions, and so forth.

9. In a lab environment, don't permit the interpreter to do the student's work. We have found that sometimes a deaf student will assume a posture of helplessness. This actually translates into a do-it-for-me posture.

10. Don't panic if your interpreter does not appear for a class or lab. In the lecture you will definitely count on your "note-taker" to pickup much of the lecture material. In a lab you will find it necessary to directly interact with the deaf student. Don't assume one of those frustration looks because it will only increase your student's anxieties. Show your adaptability. Notify the Counseling Center if the interpreter is continually absent.

11. Don't expect your deaf student to be an expert lipreader. Lipreading is only partially effective and you may have to utilize an alternate form of communication, such as writing.

12. Your deaf student may be a slow or poor reader. (You may have hearing students with the same difficulty.) This situation may present a problem in test situations and you will have to use your own judgment on time allowances.

13. In grading tests, projects, final averages, etc., you may find yourself to be unduly compassionate toward the deaf student. You may find yourself awarding extra points for the handicap rather than the quality and quantity of work. If your compassion overfloweth, you may find other students letting you knoweth. Establish a fair standard for all students.

14. Film and slide presentations may be a total loss on the deaf student. Usually, the inadequate lighting of the room and the logistics will make the interpreter ineffective. You can salvage the situation by preparing a brief summary of the presentation for the student. Or, if time permits, summarize the presentation in class so that the interpreter can communicate the information to the deaf student.

15. You may experience a personality clash between the interpreter and the deaf student. Strange as it may seem, you may actually observe an argument between the deaf student and the interpreter in your class or lab. Notify the Counseling Center if the situation persists so that they can help to resolve the matter.

16. The deaf student and the interpreter are an integral part of your class. Don't put them out on the sidelines.

* * *

Source: Szweda, R. "The Deaf Student in Your Classroom: Suggestions." Monroe Community College, Rochester, New York 14623. Excerpts from original article reprinted with permission of the author.
Also available in: Insight 1982: An Annual Collection of Articles on Teaching and Learning by Faculty of the Community Colleges of the State University of New York. 5th Anniversary Ed., 1981-82. (Available from: Office of Community Colleges, State University of New York, University Plaza, Albany, New York 12246.)

# CAREER PLANNING

*Hire the qualified.*

*— The President's Committee on Employment of the Handicapped*

ERIC Clearinghouse on Handicapped and Gifted Children 1920 Association Drive, Reston, Virginia 22091

FACT SHEET 1979

# AFFIRMATIVE ACTION FOR THE HANDICAPPED

Prepared by Michael J Ward, Program Specialist, The Council for Exceptional Children

**What kinds of businesses and organizations are required to follow an affirmative action policy?**

Any business or organization that receives federal funds in any form, including grants and contracts, is subject to compliance with Section 503 and/or Section 504 of the Rehabilitation Act of 1973.

Section 503 requires that federal contractors furnishing $2,500 or more in supplies or services take affirmative action to employ and advance in employment qualified handicapped individuals. This includes the requirement that contractors undertake appropriate outreach and recruitment activities.

Similarly, Section 504 states that "no qualified handicapped person shall, on the basis of a handicap, be subjected to discrimination in employment under any program or activity . . ." operated by a recipient of federal assistance (*Federal Register*, p. 22678).

The regulations for both sections are similar in their content. An effective affirmative action plan would insure compliance with these sections. Both sets of regulations discuss procedures such as recruiting, hiring, advancement, employment criteria, reasonable accommodation, and internal dissemination of such policies.

**What can be done to increase the number of jobs available to handicapped applicants?**

When position descriptions are developed, all physical and mental job qualifications should be reviewed to insure that they do not inadvertently eliminate qualified handicapped applicants. A comprehensive job analysis should be conducted to determine the discrete functions of each job and potential discriminating factors affecting handicapped applicants should be eliminated.

An essential element of a successful affirmative action program is a willingness on the part of employers to hire people on the basis of their ability to perform specific tasks. If there is a question as to whether an applicant will be able to perform job related functions, it should be discussed. No one should be disqualified on the basis of what may be erroneous assumptions on the part of the employer.

**What recruiting procedures can be used to increase the number of job applications from handicapped individuals?**

Position announcements should be sent to national consumer health organizations, local consumer advocacy groups, higher education disabled student programs, and periodicals widely read by the handicapped.

Contact should also be made with area representatives of the Department of Vocational Rehabilitation and the specialized services of the State Employment Commission.

Although it is unlawful to make a preemployment inquiry to determine whether an applicant is handicapped, employers should invite applicants to identify themselves as being handicapped should they wish to do so.

Locating qualified handicapped individuals will require employers to allow extra time for the screening process. When possible, available positions should be announced at least two months prior to hiring. This additional time is needed to contact appropriate schools and organizations and in turn to allow them time to disseminate information to interested handicapped individuals. Employment and rehabilitation agencies may also need extra time to search their caseloads for handicapped persons who have the appropriate qualifications.

**What can be done if a handicapped applicant needs additional training to do the job?**

An arrangement can often be made with the area vocational rehabilitation agency to allow on-the-job training (OJT) to take place at the employment site. Since on-the-job training is viewed as a substitute for going to school, the prospective employer may submit a training plan outlining the skills that the new employee needs to learn. On-the-job training may be funded to develop any special skills which would increase the employee's employment potential. The average on-the-job training lasts three months, with a possible maximum length of six months. The employee's progress is reported each month to the Department of Vocational Rehabilitation.

**What accommodations need to be made for a handicapped employee?**

When a qualified handicapped individual is located, he or she should be hired, providing reasonable accommodation can be made for his or her physical or mental limitations. Reasonable accommodation may mean improving accessibility features of a building; for example, a blind person may need braille numbers next to the floor buttons in the elevators. Reasonable accommodation could also mean job restructuring, part time or modified work schedules, provision of support personnel such as readers or interpreters, or acquisition or modification of equipment or devices (e.g., a telephone amplifier for a hearing-impaired employee). Similar provisions for reasonable accommodation also apply to the advancement of handicapped employees.

REFERENCE

*Federal Register*, Wednesday, May 4, 1977, 42(2), Section 84.4.

## EQUAL EMPLOYMENT RIGHTS FOR THE DISABLED

Q. May an employer refuse to hire you because you are disabled?
A. No. If you believe that your disability will not interfere with your ability to engage in the activities required for the job in question, you are protected by the NYS Human Rights Law. However, if the employer can demonstrate that your disability will interfere with your performing the required duties of the job, he may refuse to hire you. An employer may not refuse to hire you because other employees or customers may feel uncomfortable around a disabled person.

Q. May an employer refuse to hire me because I use special tools or devices?
A. No. The fact that you need special tools or devices should not keep you from getting the job, so long as you provide them without cost to the employer. An employer may not refuse to hire you simply because you use special tools or devices, if your use of them does not interfere with the employer's business or the safety of other employees. If you are refused employment because of a disability you feel is unrelated to the job, and you can perform the duties of that job, you may file a complaint.

Q. May an employer refuse to hire you on the grounds that the job is not safe for a person with a disability?
A. No. If you have a disability and are qualified and capable of engaging in the activities required in the job for which you are applying, fears for you safety may not be used to bar you from the position. However, if the employer can show that the safety of others would be jeopardized, you may be refused the position. An employer may also refuse to hire you if your disability prevents you from performing the required duties in the job in question.

Q. Is it against the law for employment agencies to discriminate against you becasue you are disabled?
A. Yes. Employment Agencies may not discriminate against you because of your disability. They must provide you with the same services provided to non-disabled persons. They may not refuse to refer a disabled person to an employer. This Law applies to all public and private employment agencies within the State. Disabled persons no longer need to work solely with those agencies specializing in placing disabled job-seekers.

Q. May unions or labor organizations treat you differently because you are disabled?
A. No. You must obtain the same training, membership, apprenticeship, labor-management contracts, bumping rights and leadership positions in a union or labor organization structure as non-disabled members.

Q. May an employer require you to take a pre-employment physical examination before you are formally offered the job?
A. Yes. Pre-employment physical examinations are lawful as long as the physical standards applied are reasonably necessary for the work to be performed and are uniformly applied to all applicants for the particular job category.

Q. If you are accepted for a postion by the personnel department, but then fail an employment physical, are you still entitled to the job?
A. Yes. Your disability may not be used to deny you the position if it will not prevent you from performing the required duties of the job in question. An employer and the examining physician must show that your disability will interfere with the requirements of the job. The physician's views must relate to your particular disability and the particular tasks involved for the particular job for which you have applied.

Q. May an employer refuse to promote you because you are disabled?
A. No. An employer must grant the same opportunities to you as he does to other employees for promotion to other, better-paying jobs, provided of course, that you are qualified to perform the required duties of the job in question. You must also be given the same opportunity as others to improve your skills through job-training programs.

Q. May an employer pay you less than others are paid for performing the same duties simply because you are disabled?
A. No. You must be given equal pay for equal work. The jobs do not have to have exactly the same job titles but must be similar in duties and responsibilities in order to be considered "equal."

Q. May an employer deny you fringe benefits such as sick pay, insurance coverage, etc., because of your disability?
A. No. This would constitute a denial of equal terms, the conditions and privileges of employment. You as the disabled worker, must receive the same fringe benefits as any non-disabled worker.

Q. May an employer establish separate seniority and layoff lists for disabled and non-disabled workers?
A. No. Your seniority must be based solely on length of employment, regardless of your disability status.

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Source: Equal Rights for the Disabled in New York State Under the State Human Rights Law. Washington, D.C.: American Coalition of Citizens with Disabilities, Inc., pp.1-5.
Available from: American Colation of Citizens with Disabilities, Inc., 1346 Connecticut Ave., N.W., Suite 817, Washington, D.C. 20036.

This pamphlet explains the rights of the disabled under the Human Rights Law and advises how to effectively utilize the services of the New York State Division of Human Rights whenever these rights are denied.

## MORE QUESTIONS AND ANSWERS ON EQUAL EMPLOYMENT RIGHTS

Q. Should Applicants or Workers Declare Their Handicaps?

A. Under the regulations, employees and applicants with handicapping conditions must be invited by the employer to declare their handicaps. By volunteering this information, the worker will be protected by the employer's affirmative action program. But for many persons with hidden disabilities, the decision whether or not to inform their employers about a handicapping condition can be a difficult one.

Many people fear they will be treated differently by co-workers, that they will be the object of ridicule and discrimination. Employees who have recovered from mental illness cite examples of isolation once their past history is known. Persons who acknowledge a history of alcohol abuse say their employers never really trust them.

Workers who have decided to keep their handicap a secret feel the decision will probably result in acceptance by their supervisors and allow them to be comfortable around their fellow workers. But since their handicap is not declared, these workers are not afforded the protections of the regulations. If their employers discover their handicaps and dismiss them or deny them a promotion, the workers can file complaints of discrimination under the 503 program because their handicaps have become known.

A worker, however, can declare his or her handicap at any time. It may be at the time he or she applies for a job, or even after several years of employment. Once the information is given, it must be kept confidential and the regulations encourage the contractor to seek the worker's advice regarding appropriate placement and accommodations. Only supervisors and managers may be informed of the reasons for restrictions on the work or duties of the handicapped person. First aid and safety personnel can be informed if the person's handicap may require emergency treatment.

There are many factors to consider when deciding whether to declare a handicap to the employer. One important consideration is whether the applicant or employee feels he or she will need the protection of the regulations. If a person declares and meets the definition of handicapped under the regulations, his or her employment rights are protected. The worker also gains access to a grievance process to check any suspected forms of discrimination due to the handicap.

The employee or applicant may also wish to read the employer's affirmative action plan and ask other handicapped employees how they feel the program is implemented. Making sure the information on the handicapped is kept confidential is another factor that should be weighed when making a decision. The general attitude of employer, supervisory personnel and co-workers toward the programs should also be taken into account.

Those persons with hidden handicaps who have positive attitudes toward their handicaps and their work qualifications may find that their attitude helps dispel any ill feelings the employer has about disability. Increasing numbers of employers are finding that the existence of a handicap holds little relevance, that it is a person's qualifications that count.

Q. What Should I Do If I Suspect My Employment Rights Have Been Violated?

A. Compliance under Sections 503 and 402 is enforced by the Office of Federal Contract Compliance Programs (OFCCP) of the U.S. Department of Labor. OFCCP has a network of offices around the country with major offices located in ten Regional cities (Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco and Seattle). Over sixty offices are located in area cities.

If a handicapped individual, Vietnam-era or disabled job applicant or employee feels he or she has been discriminated against, OFCCP has initiated a complaint process which allows the worker or applicant to file a formal complaint with the local OFCCP office. A veteran also has the option of filing through the local Veterans' Employment Service Office. A complaint can be initiated through a letter, telephone call or personal visit to the OFCCP office. However, a formal, written complaint is required before official action can be taken.

The applicant or employee or an authorized representative must file the written complaint with the OFCCP no later than 180 days from the date of the alleged violation. The filing deadline may be extended in certain circumstances if good cause is shown. It is wise, however, to act promptly and file the complaint as soon as possible. Complaints cannot be filed for incidents which occurred before the legislation was enacted.

The written complaint must be signed and contain the following information:

- Name, address and telephone number of the complainant
- Name and address of the employer who committed the alleged violation
- A description of the act or events you feel violated Section 503 or Section 402
- Either a signed statement that you have a history of a handicap, or some other documentation that you have an impairment or that the employer treated you as if you had a handicap. These statements can be obtained from physicians, personnel at vocational rehabilitation services, etc.
- Any other pertinent information which will assist in the investigation and resolution of the complaint.

If the written complaint contains incomplete information, the OFCCP office will require additional information from the complainant. The information must be supplied within sixty days or the case may be closed.

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Source: Everything You've Always Wanted to Know About Sections 503/402. Washington, D.C.: Mainstream, Inc., 1982.

Available from: Mainstream, Inc., 1200 15th St., N.W., Washington, D.C. 20005 (202/833-1136).

THE WHITE HOUSE CONFERENCE ON HANDICAPPED INDIVIDUALS
SUMMARY FINAL REPORT
Industry-Labor Council: Employment and Economic Opportunity and Security

What is the most effective means of modifying negative attitudes toward handicapped persons and resultant hiring behavior of employers in the public and private sectors?

- AWARENESS PROGRAMS--Educational, informational, and awareness programs should be continued and expanded to reach all who are or should be concerned with making affirmative action for the handicapped work successfully.
- SPECIAL TRAINING PROGRAMS--Industry and labor should be encouraged to become involved in the development of training programs specifically designed for the handicapped and should assist in placement of the handicapped (i.e., CIL employer advisory committee and employers' participation in summer work programs).
- SPECIAL PROBLEMS OF SMALL EMPLOYER--The problems of benefit costs for the small employer should be recognized and dealt with, and there should be more and better communication between unions and employers regarding actuarial statistics and cost factors for small and medium-sized employers.

What positive steps can be taken to assist employers to recruit and successfully employ handicapped persons?

- PILOT PROJECTS--Develop some methods and pilot projects to help management and labor gain a broader understanding and appreciation of the contribution to be made by handicapped persons in the job market.
- STANDARDIZED LISTINGS OF JOB-SEEKERS--All states should maintain standardized listings of handicapped job-seekers that give specific client information, especially in regard to degree of qualification. For employers there should be more public information (recruitment pamphlets, etc.) and public relations efforts in regard to vocational rehabilitation services.
- JOB FAIRS--Job fairs where face-to-face information regarding skills of handicapped persons and job requirements can be exchanged should be held in every state, along with other innovative recruitment programs.

How can attitudes of supervisors be modified to ensure equal opportunity for career advancement for disabled workers?

- AWARENESS TRAINING FOR COMPANY PERSONNEL--Employers should move aggressively to incorporate awareness training about the handicapped in company and personnel training programs, and this training should be directed at attitudes and biases stemming from fear and ignorance and should portray the disabled performing a wide variety of tasks demonstrating their abilities to perform adequately and within production standards. (Government agencies can assist in development of such programs by providing information and materials for employer use.)
- AWARENESS PROGRAMS FOR SUPERVISORS--Awareness programs should be developed for supervisors and associates of handicapped persons.
- PARTICAPATION BY SUPERVISORS AND FOREMEN--Foremen and/or line supervisors should participate in the interviewing and selection of handicapped individuals as a routine personnel practice.

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Source: The White House Conference on Handicapped Individuals (May 23-27, 1977) SUMMARY Final Report. Dept. of HEW, Office for Handicapped Individuals. Available from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 052-003-00563-8

# vocational rehabilitation can help

The New York State Office of Vocational Rehabilitation (OVR) serves
- emotionally
- mentally
- physically

handicapped people through this public program.

## OVR SERVICES AVAILABLE TO INDIVIDUALS

- Diagnostic Services and Evaluation of Rehabilitation Potential. These services include medical and psychiatric examinations, psychological testing, vocational evaluation and extended evaluation. Diagnostic services are used to determine an individual's eligibility for services, rehabilitation potential and need for specific types of services.

- Counseling, Guidance and Referral Services. These services include career guidance, the development of the IWRP and maintenance of the counseling relationship between the client and the OVR counselor through the rehabilitation process, and referral to other agencies that may provide services to clients if OVR is unable to do so; for example, other organizations may provide clients with training in daily living skills at the same time that OVR is providing vocational training.

- Physical and Mental Restoration Services. These services include purchase of wheelchairs, hearing aids, prosthetic and orthotic devices and psychotherapy. Physical and mental restoration services shall be provided for the purpose of correcting or substantially modifying a diagnosed physical or mental condition which results in a substantial handicap directly affecting the client's capability and ability to obtain and maintain a gainful occupation.

- Vocational or Other Training Services. These services include personal and vocational adjustment training, prevocational and vocational training, vocational training at a rehabilitation facility, college or university, business school or business college, vocational school, other academic institutions, on-the-job training, correspondence school, tutoring, and other training appropriate to the Individualized Written Rehabilitation Program. Training may include room and board, books and supplies. There is a dollar limitation which is specified in OVR policy.

- Maintenance. These services are provided, when appropriate, to cover expenses necessary to the evaluation of the client's vocational rehabilitation potential or the achievement of the client's vocational rehabilitation.

- Transportation. These services cover transportation expenses incurred by a client during evaluation of his/her vocational rehabilitation potential or in the achievement of the client's vocational rehabilitation.

- Interpreter Services for the Deaf. These services are provided to assure adequate communication between a deaf client and OVR staff, or to assure maximum benefits of planned vocational rehabilitation services.

- Reader Services and Rehabilitation Teaching Services. These services include readers' services and note-taking services. They are provided to clients who have problems with reading and/or taking notes; for example, the visually impaired and the developmentally disabled, among others. They are provided as aids in the training process.

- Telecommunications, Sensory and Other Technological Aids and Devices. These devices are provided for the purpose of improving a client's ability to enable the client to obtain and maintain a gainful occupation.

- Placement. These services are provided to assist a client to secure a suitable and gainful occupation.

- Postemployment Services. These services are provided to help the client maintain and retain a gainful occupation. However, supportive services such as transportation, attendant care and maintenance may not be provided unless they are directly supportive of another service. They may not be used to solely maintain a gainful occupation since this is a goal and not a service. For example, transportation may be provided to a client in postemployment services to help that person obtain a new prosthetic device needed to maintain a gainful occupation.

- Medical Care for Acute Conditions. These services include care for acute conditions which arise during a client's rehabilitation program and which, if not cared for, would complicate or delay the achievement of the client's vocational rehabilitation objectives.

- Tools, Initial Stock, Equipment and Supplies and Occupational Licenses. These items are furnished if they will increase the client's prospects of successful employment of self-employment following completion of the rehabilitation program. Need for such service must be well documented and there is a dollar limitation which is specified in OVR policy.

- Home Modification, Adaptive and Household Equipment. These services are provided to meet the functional needs of the client in the home, if such service is required within the context of the client's IWRP. There is a dollar limitation which is specified in OVR policy.

Source: The OVR Handbook (1981), The University of the State of New York, The State Education Department, Office of Vocational Rehabilitation, Albany, New York 12234. The Handbook is a 23 page publication of the New York State Office of Vocational Rehabilitation designed to familiarize those interested in helping the handicapped with the functions of and services offered by New York State Office of Vocational Rehabilitation. It describes the vocational rehabilitation process, the population served, and OVR services available to individuals. It includes a listing of OVR area offices and counties served plus a list of commonly used acronyms.

## TRAINING THE HANDICAPPED FOR PRODUCTIVE EMPLOYMENT

### RECOMMENDATIONS TO PROGRAM IMPLEMENTORS

1. Make a commitment to aid the career development of handicapped persons.
2. Include wide participation in the movement to improve services to handicapped persons. Have all participants (for example, students, teachers, handicapped, nonhandicapped) help with organization and planning. Get support from the community, business, industry, labor, parents, and the general public. Make this a joint effort of public and private educators, rehabilitation specialists, employment development specialists, medical personnel, volunteers, and private citizens. Include elected officials from the start.
3. Develop a clear policy on career development and career education for handicapped persons and publicize the policy.
4. Contact state department of education specialists for assistance.
5. Continually survey the available local, state, and federal funding sources which can be pursued, and set up a working application file for quick responses to requests for proposals (RFPs) that come from government agencies.
6. Conduct a thorough needs assessment to determine what already exists in the system that can be built upon. Identify potential handicapped clients, desired outcomes for these clients, services and programs that are working well, and the gaps that must be filled.
7. Develop a one-year and a five-year plan for action. Set goals, objectives, priorities, and timelines. Decide procedures for filling the gaps noted in the needs assessment, and assign responsibilities to people. Be sure to include a strong evaluation component.
8. Examine your local school's advisory committee on vocational education. Add handicapped consumers as members, or set up a special committee on the career needs of the handicapped.
9. Hire, if at all possible, a full-time coordinator of career vocational education for handicapped individuals, but be certain that this individual works closely with all nonhandicapped programs, and works toward mainstreamed career/vocational education.
10. Review the existing cooperative school agreements between education and rehabilitation agencies for possible strengthening and updating.
11. Begin infusing the following career education concepts into existing programs and curriculum:
    a. Career awareness and self-awareness.
    b. Career exploration.
    c. Consumer/survival skills.
    d. Career/vocational evaluation.
    e. Career/vocational guidance.
    f. Career preparation (vocational skill development).
    g. Decision making and problem solving.
    h. Career placement and followup.
12. Set up a career center:
    a. Be sure it is accessible to physically handicapped persons.
    b. Gather information on careers, education and training programs, job search methods, etc.
    c. Establish a file on community resources available for handicapped individuals. Include names, addresses, and telephone numbers of contacts and specific functions and services offered.
13. Round out staff members' skills:
    a. Conduct workshops on grantsmanship in vocational/career education, mainstreaming, rehabilitation techniques, innovations in vocational services for handicapped persons, utilizing community resources, redesigning jobs and workplaces, adapting and designing career development materials, and vocational evaluations.
    b. Have staff visit innovative programs in the area.
    c. Invite rehabilitation counselors, employment specialists, and educators from different specialties to conduct training sessions for each other.
    d. Train professionals, parents, retired persons, and other volunteers to be career aides, interpreters, and tutors.
    e. Educate parent groups in effective educational and political strategies.
    f. Provide sabbatical leaves to allow staff members to study and/or work in settings that would add to their knowledge of handicapped persons.
    g. Acquaint service providers with the differences and needs of handicapped members of minority groups.
14. Improve career guidance and counseling:
    a. Hire qualified handicapped persons as counselors, counselor aides, and peer counselors.
    b. Assign at least one counselor to be an "enabler" for handicapped individuals.
    c. Acquaint all counselors with the needs of handicapped persons so that all can particiapte in the counseling process.
    d. Set up a Big Brother/Big Sister program involving handicapped adults with handicapped children and youth.
    e. Develop a comprehensive career guidance program with a plan that is based on assessed needs and that includes short- and long-term career guidance goals for the school and for individual counselees/students.
    f. Tie planning and evaluation of career guidance closely together.
    g. Assist teachers in doing career guidance in the classroom.
    h. Increase group career guidance.
    i. Include strategies for coping with stress and with change, interpersonal skills, and other career-related areas.
    j. Communicate regularly with all others doing career-guidance related activities, i.e., work experience coordinators, career center directors and staff, advisory committees, employment specialists, rehabilitation personnel.

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Source: Weisgerber, R.A., Dahl, P.R., and Appleby, J.A. Training the Handicapped for Productive Employment. Rockville, Maryland: Aspen Publication, 1980, pp. 229-305.
Available from: Aspen Systems Corporation, 1600 Research Blvd. Rockville, MD 20850.

A step-by-step guide for developing an effective job training and placement program for the handicapped. The Journal of the American Vocational Association calls it "the ammunition needed to sell employers on hiring handicapped workers... information needed to develop a workable, effective job training and placement program for the handicapped." Through 12 chapters and appendices, this handbook covers many facets of the process of training and successful entrance of the handicapped into the mainstream of vocational-occupational pursuits.

15. Improve instruction:
    a. Begin moving toward individualized, competency-based instruction.
    b. Work out an instruction plan with each handicapped student (and parent, it appropriate).
    c. Watch for signs of learning handicaps; consult with experts when necessary.
    d. Increase team teaching with specialists from vocational education and special education.
    e. Provide the necessary support services to make mainstreaming succeed.
    f. Modify teaching techniques and/or classroom setting to prevent a situation from intensifying a disability.
    g. Remove architectural barriers.
    h. Build upon the capabilities of the learner, assist him or her in excelling in something.
    i. Demonstrate how handicapped and nonhandicapped persons can benefit from interacting with each other.
    j. Develop some multi-modal (braille, large print, audio tape, tactile) career development materials.
    k. Get assistance from community organizations for handicapped persons.
16. Start or expand a cooperative education/work experience program. Combine actual work experience with related classroom instruction.
17. Develop an aggressive outreach program to actively recruit handicapped persons for programs:
    a. Utilize families of handicapped persons, volunteers, and community agencies.
    b. Use handicapped recruiters whenever possible.
    c. Make nonhandicapped recruiters aware of the abilities of the handicapped.
    d. Disseminate information on available services to potential users. Carry the facts to advocacy groups, convalescent hospitals, and other locations, using speakers and audiovisual presentations.
    e. Provide bilingual materials where appropriate.
    f. Set up a "hotline" to provide information on available services.
18. Improve communication among everyone working in the area of career development for handicapped individuals:
    a. Organize conferences or forums that bring together occupational/vocational educators, guidance personnel, rehabilitation specialists, representatives from parent groups, employment personnel, and others.
    b. Visit specialists in "their own worlds" in order to grasp the details of their involvement.
    c. Join each other's professional organizations; at least attend some meetings and conferences.
    d. Identify exemplary projects and tell others about them. Perhaps establish a success stories project and assign a coordinator. Publish a newsletter on vocational activities in the area. Ask the public information specialist at the local school district office for some advice.
    e. Rotate personnel among vocational education, special education, rehabilitation, adult education, and employment development for a certain period of time. Evaluate the results and consider another rotation.
    f. Get ideas from innovators in the classroom as well as in the community.
    g. Arrange local meetings to provide information and to mobilize community support for the handicapped.
    h. Let employers know what program completers or program leavers are available and seeking work.
19. Expand evaluation efforts:
    a. Never evaluate success of programs for handicapped persons (or nonhandicapped persons for that matter) on the basis of job acquisition alone.
    b. Improve followup activities and relate them to total program evaluation. Tell students prior to their leaving that they will be contacted in the future and the reasons for the followup. Visit individuals at least one year after they acquire jobs in order to smooth out problems and solutions between employers.
20. Increase leadership development of handicapped youth and adults.
    a. Distribute information and recruit handicapped persons as members of advocacy groups and student organizations.
    b. Include handicapped persons in scholarship and fellowship programs.
    c. Provide leadership development sessions as well as successful role models.
    d. Assign real--not token--responsibility to handicapped persons.
21. Work on removing architectural barriers and enforcing the special parking laws that already exist. Hold events and classes in accessible places.

RECOMMENDATIONS TO EMPLOYERS

1. Seek the cooperation of management, employees, and union personnel in a renewed campaign to hire qualified handicapped employees.
2. Develop a creative affirmative action plan for hiring qualified handicapped persons.
3. Actively recruit qualified handicapped persons for job openings and promotions.
4. Analyze your hiring process:
    a. Re-evaluate the emphasis given to medical histories in the screening process.
    b. Use physical examinations for selective placement and not selective elimination of applicants.
    c. Perform physical and mental demands-analyses of jobs as the basis for an objective determination of physical and mental requirements.
    d. Consider giving examinations in nontraditional ways, such as orally for nonreaders.
    e. Stress handicapped applicants' capabilities and potential capabilities rather than their handicaps.
5. Restructure or modify jobs to reduce the effect of a handicap on a worker's performance. This may require:
    a. Making hours more flexible;
    b. Splitting one job between two part-time employees (job sharing);
    c. Designing a "sheltered enclave" for certain handicapped employees.
6. Change equipment or add adaptive devices to make the job situation more amenable to handicapped persons' needs, when appropriate. In some circumstances, the Department of Rehabilitation may provice handicapped persons with specialized equipment that will help them do their jobs.
7. Consider adopting the 700-hour temporary trial appointment system used by the Civil Service Commission for severely handicapped persons.
8. Collect information comparing handicapped and nonhandicapped workers' absenteeism and productivity.
9. Consider using the "buddy" system for new employees.
10. Offer your consultation services to rehabilitation workshops and to local school districts, and volunteer to serve on local vocational education advisory committees and Mayor's Committees for Employment of the Handicapped.

## DEALING WITH EMPLOYER CONCERNS

Facts to dispel misconceptions and practical solutions to legitimate concerns are the keys to success. These, coupled with a straightforward, honest, businesslike approach will allow you to overcome most employer concerns. Employer concerns will arise in four main areas. Not surprisingly, these closely parallel the areas in which problems commonly arise in placing handicapped students:

- Employee related expenses will rise. Common fears are: very expensive equipment or facilities modifications will be needed for the orthopedically impaired and costly aids will be needed for the blind, the partially sighted, or the hearing impaired.
- Handicapped employees will not do a satisfactory job. Common fears are: speed will decrease, errors will increase, the efficiency of others will be impaired because the handicapped will have to ask for help too frequently, and the blind and orthopedically impaired will be unable to use equipment properly.
- Handicapped employees will not be able to work well with others or will put excessive burdens on them. Common fears are: communication problems with the hearing or speech impaired will present extreme difficulties, the retarded will not understand simple corrections or changes in work activities, the blind will need someone to lead them around, customers and clients will be ill-at-ease around the handicapped for one reason or another, and handicapped employees will lack one or another social skill to get along with nonhandicapped coworkers.

### Concern: Employee Related Expenses Will Rise and Other Hassles Will Increase

Such concerns are usually unfounded. Data provided by the President's Committee on Employment of the Handicapped shows that handicapped workers are typically at least as safe and reliable as other employees. Similarly, handicapped workers are at least as stable on the job as the nonhandicapped. For example, the duPont study of 1,000 handicapped workers found that 93% of the handicapped workers were average or better in terms of job stability when rated against duPont workers as a whole (Wolfe, 1973-74). A survey of 100 large corporations by the U.S. Office of Vocational Rehabilitation found that 83% of the respondents had lower turnover rates for the handicapped than for the nonhandicapped, while only 1% reported higher turnover rates. In sum, handicapped workers are, if anything, less likely than others to lead to increased costs by arriving late, being absent, or quitting.

Perhaps the most common concern you will have to deal with is fear of rising insurance costs, a topic closely related to safety. Fears of increased group insurance rates are generally unfounded. Rates are almost always based on two factors: the type of business and past accident records of the company. Neither of these concerns employee handicaps. Thus, a new handicapped employee will cause rates to go up only if that employee has more accidents than the nonhandicapped, leading to increased expenses for the insurance. Since handicapped employees do not typically have more accidents, they will not cause rate increases. The employer can verify this method for computing rates by making a quick call to his carrier.

In addition, the employer may have questions about the effect of hiring handicapped people on workmen's compensation rates. The method for computing such rates varies from state to state and you should become familiar with locally applicable procedures. To take one example, California's procedures for determining premiums do not allow higher rates if handicapped people are employed, nor do New York's.

Moreover, "second-injury laws" have been enacted in almost every state to encourage the hiring of the handicapped by protecting the employer against exceptional expenses should the handicapped worker become injured on the job. To take California as an example again, Section 4750 of the Labor Code states:

> ...an employee who is suffering from a previous permanent disability or physical impairment and sustains permanent injury thereafter shall not receive from the employer compensation for the later injury in excess of the compensation allowed for such injury when considered by itself and not in conjunction with or in relation to the previous disability or impairment. The employer shall not be liable for compensation to such an employee for the combined disability, but only for that portion due to later injury as though no prior disability or impairment had existed.

It is a good idea to become familiar with applicable laws and regulations in your state so that you can accurately advise employers of the effects, if any, on workmen's compensation of hiring the handicapped. You may also discover additional protections and safeguards for the employer.

*Specific points related to individual students*

Provide the employer with the attendance and safety record that the student has compiled in the vocational program. If the student has performed satisfactorily during training, there is every reason to suppose that job performance will be satisfactory, too. If the student has had any accidents, be sure to explain the circumstances, the severity, and subsequent steps taken to minimize the likelihood of a recurrence. Also, be sure to put any accidents in perspective--if practically all neophyte mechanics skin their knuckles a few times when the wrench slips off the nut, then it is no surprise if a deaf student suffers this mishap a time or two as well.

If attendance was spotty at first, perhaps because the student had initial trouble in adjusting to the mainstream classroom, say so, but indicate what steps were taken to overcome this, and indicate how the student has performed for the past three months, six months, and year. This will show if the student is adaptable to new situations and is currently performing as well as the nonhandicapped.

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Source: Dahl, P.R., Appleby, J.A., and Lipe, D. Mainstreaming Guidebook for Vocational Educators: Teaching the Handicapped. American Institutes for Research in the Behavioral Sciences. Salt Lake City, Utah: Olympus Publishing Co., 1978, pp.263-276.
Available from: Olympus Publishing Company, 1670 East 13th St., Salt Lake City, Utah 84105.

Whatever the specific concern of the employer, present accurate information about how well the student performs, how this performance compares to that of other students, and how much the student has improved. This information is very likely to be impressive to the employer. If the employer is still skeptical, particularly about safety, suggest a visit to the school to watch the student perform.

Concern: Accommodation Will Be Unreasonably Expensive or Complex

Accommodation is often much less difficult than people expect. This is shown in the experience of Sears, Roebuck & Co. Here are portions of a letter from Paul Scher, Sears' Rehabilitation Services Specialist to the National Center for a Barrier Free Environment:

*In the process of carrying out a survey of handicapped people at Sears, we asked our units to indicate when unusual accommodations had to be made. Here are examples of accommodations:*

- *Six cassette tape recorders for six blind maintenance agreement telephone salespeople, $300.*
- *Lowering desk, widening door, installing grab bars in lavatory for two-dozen service technicians in wheelchairs, $300 to $600 (estimates).*
- *Rental of IBM Typewriter with shield for clerk with cerebral palsy, standard rental charge.*
- *Telephones with amplifiers for hard-of-hearing employees, $18 per installation plus 65 cents a month for rental.*
- *Optacon for blind rehabilitation specialist, including training in its use, $3,800.*
- *We are contemplating the possibility of installing $12,000 worth of equipment in our computer department to allow six to eight blind programmers to function.*

*It is our position that professional handicapped applicants, especially those trained by departments of vocational rehabilitation, should bring their own special equipment on the job. All new Sears units incorporate barrier-free features--virtually zero cost for handicapped employees.*
*In short, almost all accommodoxions for handicapped people require minimal expense, easily absorbed by a company our size. It has been our experience that in most instances the employment of people with handicaps requires no accommodations and no unusual expense. (Reprinted from REPORT, May/June 1976, by permission of the National Center for a Barrier Free Environment.)*

Similarly, the duPont survey found that minimal adjustments were required for most disabled employees. A recent study of over 30 corporate facilities found that the minimum modifications necessary to assure accessibility could be made for less than 1¢ per square foot (William Cochran Associates, 1977).

A related point emphasized by Mainstream, Inc., which you can impress on employers is that a building can be made accessible even if not all possible modifications have been made. The important thing is to help the employer determine the most economical way to make whatever alterations are needed to allow a handicapped person to get to the work area and get the job done. Moreover, it is not always necessary to make elaborate modifications. For example, putting blocks under desks for those in wheelchairs or affixing braille labels to storage bins are easilty accomplished tasks, and the effort is more than repaid when they lead to the hiring of a dependable employee.

*Specific points related to individual students*

"What exactly must I do to accommodate young Jones?" That is the question the employer will ask and which you should be in a positon to answer. Workplace or equipment adaptations that you have made for students in your programs will probably be very similar to those that will be needed on the job. Invite the employer and the person who will be the immediate supervisor of the student to visit the vocational facility to view these modifications. Then examine the work area at the future place of employment to determine how similar modifications can be accomplished there, if necessary. Also, check for any additional accommodations that must be made at the employer's site. For example, controls on equipment at the vocational center may have raised indicators so that settings could be determined by touch without modification, while those at the employer's site do not.

Although employers' worst fears about the expense of accommodation are often unfounded, there will be cases in which costly barrier removal or expensive aids may be needed to accommodate a given individual in the workplace. In such cases, provide the employer with the names of vendors and suppliers and explore possibilities for defraying expenses in whole or in part. Departments of Rehabilitation are often able to purchase aids for the handicapped for use on the job or to underwrite some portion of the costs. Some tax relief is available for employers who remove barriers under Section 2122 of the Tax Reform Act of 1976. Under the Act, up to $25,000 can be deducted per taxable year for modifications made to increase accessibility. State and local Department of Rehabilitation personnel with whom you have established effective contacts should be able to keep you apprised of the latest developments in these areas. They may also be able to work directly with you and the employer to develop a workable plan at the least cost to the employer.

Concern: Handicapped Employees Will Not Do A Satisfactory Job

Properly trained handicapped employees usually perform at least as well as their nonhandicapped colleagues. Six large-scale surveys showed uniformly favorable job performance ratings (see "Application for Employment: To American Industry for the Physically Handicapped" by The President's Committee on Employment of the Handicapped)...

*Specific points related to individual students*

Two things that can help you to overcome this concern for individual students: information about performance in the vocational program and employer observations of the student at work.

In providing the former, focus on skills the student has that will benefit the employer. Use descriptions of skills that are directly relevant to the employment situation; do not just emphasize that the student is a fine, eager person who is a whiz at this or that. Functional descriptions of competencies gained are as

useful to the employer considering a job candidate as to the vocational educator evaluating progrss in class. For example, an employer might wonder how a blind student can align a handsaw. Be ready to demonstrate how the handicapped student does seemingly very difficult tasks, or take along photographs of the student doing them.

Give the employer a chance to see the student in action. Invite the employer to the vocational school to see the student demonstrate those skills that would be required on the job. Be sure to include skills about which the employer has the greatest doubts. This way, the employer can see the handicapped student working independently, the retarded student operating equipment safely and carefully, the blind student getting about the shop, and the deaf student exchanging simple information with other students by note or gesture.

Work/study placements are also effective. They allow the employer to observe how the student performs in the actual work situation. The last, of course, is to allow the employer to see how the student gets along with coworkers, the next area of concern.

In all of your contacts with the employer, be frank about the student's weaknesses as well as strengths. Emphasize the latter, of course, but do not feel compelled to represent every handicapped student as an unrelenting paragon. A realistic appraisal is much better in the long run as the realistically apprised employer will know what to expect of the new employee, and the graduate will not be in the position of having to meet unreasonable expectations.

In the same vein, be realistic in appraising difficulties that exist on the job that did not exist in the training setting. Usually, equipment adaptations, workplace modifications, and special aids that were adequate to overcome problems during training will suffice, perhaps with slight alteration, to overcome similar problems on the job. Occasionally, however, you may encounter tasks which present problems that are unreasonably difficult, if not impossible to solve.

If problems arise that you cannot solve, tell the employer this and call in rehabilitation or other specialists with whom you have contacts. If no solution is found, it is far better not to place the student with the employer. This approach will avoid an unnecessary failure for the student and will build employer trust in your earnestness to find good matches between the candidate and the job.

Concern: Handicapped Employees Will Not Be Able To Work Well With Others, or Will Put Excessive Demands On Them

Often, supervisors and coworkers will have had little or no experience in working alongside the handicapped. Their needs for new skills, information, and understanding will probably be similar to those of vocational teachers with handicapped students in their classes for the first time.

Some specific concerns in this area are based on simple misunderstandings, such as the fear that the blind will be forever getting lost or crashing into things unless they have someone to guide them around. You can overcome concerns in this area by providing training and information to supervisors and coworkers before the handicapped student arrives, by providing on-site assistance during the transition to work, or both. The variety of specific methods that might be useful is too large to attempt to enumerate fully. Somethings you may suggest are:

- Instruction for coworkers in basic tips for communicating with deaf workers.
- Assistance in familiarizing the blind worker with the new environment.
- Meetings between the vocational teacher and the prospective supervisor to discuss any interpersonal problems the student had in class, ways that such problems were solved, and how the teacher feels they can be avoided.
- Meetings between work/study or on-the-job training site personnel and the prospective employer to discuss any problems that developed and how they were solved. Of particular interest, when relevent, will be the quality of the student's interactions with customers.
- "Ice-breaking" introductions of the student to supervisors and coworkers before employment begins.

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# GETTING THAT JOB: CONCRETE STEPS TOWARD GAINFUL EMPLOYMENT

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Disabled college graduates take much longer than their able-bodied peers to obtain employment, and all too frequently end up unemployed or underemployed. What can be done to insure successes? Well, without trying to sound facetious, successful applicants are those applicants judged to be successful by potential employers. Therefore, knowing the criterion employers use to evaluate job applicants is essential in order to map out a successful career planning as well as placement strategy.

According to Powell (1974), the top 15 reasons employers give for rejecting job applicants are:

1) Lack of proper career planning--purposes and goals ill-defined;
2) Lack of knowledge of field of specialization--not well qualified;
3) Inability to express self clearly;
4) Insufficient evidence of achievement or capacity to excite action in others;
5) Not prepared for the interview--no research on company;
6) No real interest in the organization or the industry--merely shopping around;
7) Narrow location interest--unwilling to relocate;
8) Little interest and enthusiasm--indifferent;
9) Overbearing--overaggressive--conceited;
10) Interested only in best dollar offer;
11) Asks no or poor questions about the job;
12) Unwilling to start at the bottom--expects too much too soon;
13) Makes excuses--evasive--hedges on unfavorable factors in record;
14) No confidence or poise--fails to look interviewer in the eye;
15) Poor personal appearance (p. 79).

These "knockout" factors are, by no means, limited to job applicants who have disabilities. However, the increased difficulty this population has in obtaining professional employment warrants exploration of reasons rejections occur so frequently and outlining implications for action.

## Recruiting Techniques

We need to focus, then, on techniques which will encourage students to start planning for gainful employment early. The following are some outreach activities which will prove helpful in successfully recruiting students for career-related services.

1) Designate a section of the Disabled Services newsletter for articles on career trends, Affirmative Action and related legislation, Career Planning and Placement events/programs/services. Discuss the benefits of early involvement and the consequences of waiting too long; say it like it is.

2) Conduct presentations for Department of Rehabilitation staff to describe campus career services, emphasizing the need for early involvement. Request that they refer those clients who attend your campus, particularly graduating students.

3) Obtain referrals from academic advising, dorm resident advisors, counseling center and related campus departments.

4) Invite member of Career Planning and Placement staff to present at new student orientation and similar gatherings.

5) Correspond with seniors, encouraging early participation in on-campus recruiting program.

6) Post fliers advertising programs of Placement Center. Display their brochures in high-traffic areas.

7) Personal referrals in initial in-take interview.

8) Advertise services in office pamphlets/brochures.

## Career Counseling for Students with Disabilities

Career Advisement specifically for disabled college students is a relatively new concept. Ideally, the advisor will be 1) someone with rehabilitation specialization and 2) be housed in the Career Planning and Placement Center to mainstream the service and interact with employers. Other options include housing the advisor in the Disabled Services Office or conduct in-service training with Placement Center staff in order to develop specialized services. The route you take will depend on the individual situation at your campus and the resources at your disposal. The remainder of this paper will focus on issues that need to be addressed when working with disabled students in the career planning and placement process.

## Career Planning

Theoretically, the process is the same as in advising able-bodied students; the goal is to decide upon a career that maximizes strengths and abilities, and is consisitent with interests, values, preferred lifestyles, etc. Additional issues can include any or all of the following topics which should be addressed by the counselor at some

point in the career planning process; students will probably NOT initiate discussion of these topics.

A. Discussion of the disability
   1. What is the nature of the disability and how does the student feel about it?
   2. How does the student perceive the disability impacting employment? What are the student's fears/reservations/concerns about his/her ability to perform successfully on the job?
   3. What are the student's strengths and abilities?
   4. How much does the student know/understand about the disability? Does he/she have recent information?
   5. What is the student's support system like? Does he/she know anyone with a similar disability?
   6. Is the student on medication? What type and how often is it taken? Does student have any side effects? (Consult Physician's Desk Reference.) How will side effects impact job performance?

B. Career exploration
   1. Why has student selected present major? Does student convey "ownership" of career decisions/goals?
   2. Does student need information on modifications and accomodations that would allow additional career options?
   3. Is student "self-limiting"?
   4. Does student know what career options will be available with his/her major? Has a goal been set?
   5. Aside from declaring a relevant major, does student know how to plan for career aspirations. Explore: supportive coursework outside of major; involvement in extra-curricular activities and professional groups; work experience; etc.
   6. Is student being sponsored by a community or state agency? Is student keeping in contact with them, advising them of changes in plans, etc? Do you have student's permission to share pertinent information with his/her counselor?

C. Work experinece
   1. What kinds of work experience does student have? What was gained from that experience? How did it work out?
   2. Does student need work experience, particularly as it relates to career objectives?
   3. Will paid employment jeopardize sources of financial assistance? Explore variety of ways to obtain experience: volunteer, experience for academic credit, internships, co-operative education, summer and part-time jobs.
   4. Will student consider using work trial period to gain experience?
   5. Does student have job seeking skills needed to obtain experience?

Placement

As with career planning, the placement process is theoretically the same as with able-bodied job applicants; it is the APPLICANT'S responsibility to sell him-or herself to a potential employer before leaving the interview. This is not obvious to most disabled applicants who frequently feel an employer has to make an offer because of an exsisting handicap. Perceiving that this responsibility lies with the employer, the disabled applicant does not adequately prepare for employment interviews. An applicant can have all the qualifications in the world for a job, but if he/she does not have effective job hunting techniques, he/she is not going to get an offer!!!

A. Affirmative Action
   1. What is the student's understanding of his/her employment rights and the employer's obligations? (Correct myths.)
   2. Accomodations: is student aware of what his/her needs will be on the job? Can he/she convey these needs?
   3. Discussing the disability in the application process: student's concerns and questions include the following: "Who should bring up disability?" "Should I tell?" "How do I tell?" "What do I tell?" "When do I tell?" "What if I don't tell and they find out (e.g., Medical Exams)?" "Should I put my disability on a resume?" "Do I have to answer questions about my disability on application forms? What should I say? What if I leave it blank?" All of these questions should be explored thoroughly, discussing legal and illegal interviewing techniques. There is no one right solution that will assist all students in all situations; the student who prepares well will know how to weigh each situation and use his/her own discretion. For example, no one HAS to bring up the topic of disability; however, if the student feels tension and anxiety in the air, it may be wise to address ABILITY to perform the job and invite employer to express concerns. Student should take care in selecting vocabulary to discuss disability; try for ability-focused conversation and avoid labeling the "diagnosis" (all that Latin doesn't mean much to most employers anyway.)
   4. Discrimination: how to handle it during and/or after the employment interview.

B. Preparation
   1. Student must enter the employment process with the assumption that the interviewer will know little or nothing about disability. Given this assumption, student can also assume that he/she has questions about the applicant's ability to perform at the job, but may not feel comfortable asking these questions. If these concerns are not addressed, the applicant will not be offered a position. Therefore, student will want to be prepared to educate the employer on the ways in which his/her disability will not handicap ABILITY to perform effectively on the job. Student should have a thorough understanding of the tasks involved and be able to confidently convey qualifications to perform these tasks.
   2. Has student researched the field in general, and specific career paths within the organization of interest?
   3. Has student attended an interviewing techniques workshop? Does he/she have a resume which effectively summarizes qualifications/experiences?
   4. If student has a severe speech impediment, he/she may find it helpful to bring a prepared summary of qualifications, answers to expected questions and a pen and paper. Focus on easing the communication process. Student should also welcome the employer to ask him/her to repeat statements when not understood.

C. Positive presentation of self--Job applicants must present themselves in a confident/assertive manner in order for prospective employers to feel confident about offering them positions.
   1. Making a good first impression. How does student come across to you? How assertive are student's verbal and non-verbal behavior?...Those factors which impact one's perception of confidence/assertiveness can all be limited by the presence of a disabling condition. Consider these: handshake, eye to eye contact, good posture, brisk walk, tone of voice, gestures, facial expressions, verbal content. Can student improve upon some areas and compensate in others? I urge interested readers to refer to Huss and Reynolds, 1980 for an in-depth look at assertiveness training with disabled college students.
   2. Should the job applicant initiate the handshake? Depending on the nature of the disability, it may not be obvious to the employer that the applicant is able to shake hands. The first few moments can be awkward and tense unless applicant makes the first move. If he/she cannot shake hands, eye to eye contact, good posture, and a confident greeting will compensate nicely.
   3. Emphasize abilities and minimize the limitations! Role-play will be extremely valuable in preparing the student to handle a myriad of situations, and the variety of employers and interviewing styles he/she may be faced with.
   4. Discuss appropriate dress for the interview. Give specific guidelines for clothes, hair, grooming, punctuality, etc. These areas may not be obvious to someone with limited interviewing experience.

Conclusion

In conclusion, although disabled college students have a more difficult time obtaining employment upon graduation than their able-bodied peers, it seems that the self-imposed barriers of ineffective career planning and placement techniques are largely to blame. With a little bit of outreach, you can encourage and motivate students on your campus to adopt a proactive attitude toward developing and achieving career aspirations. Some "implications for action" are as easy as selecting one course over another. Others take some time; but this is time well invested in student's own professional development. Help your students see that no one can do this for them. And no one should.

* * *

Reproduced from
The Disabled Student on American Campuses:
Services and the State of the Art

The Proceedings of the 1977 AHSSPPE Conference
Association on Handicapped Student Service Programs in
Postsecondary Education (AHSSPPE)
P.O. Box 886; Ames, Iowa 50010 c1978

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The President's Committee on Employment of the Handicapped has prepared a useful list of practical suggestions for job seekers.

DO:

- Learn ahead of time as much as you can about the company. Know what goods it produces or what services it sells.
- Apply in person and go alone. Mail or telephone contacts rarely get results.
- Be on time if you have a definite appointment
- Look your best, well-groomed, and appropriately dressed.
- Apply for a specific kind of work.
- Speak clearly.
- Stress your qualifications for the job you want; review your past experience, training and skills which would fit you for the job; take a list of former employers, dates and periods of your past work history. If you have none, state any training or home study that is a qualifying point in getting the job.
- Stress the contribution you can make to the company.
- Answer questions honestly and enthusiastically.
- Briefly explain your physical limitations and be optimistic in your attitude.

DON'T:

- Plead how much you need a job.
- Apologize for your handicap.
- Dwell on your disability or recount a lengthy medical history.
- Hedge in answering questions, misrepresent facts, bluff or be a know-it-all.
- Balk at a request to take a physical examination.
- Be discouraged if the first interview is unfavorable.
- Fail to exhaust all the community resources which exist for your benefit.

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## RESUMES

One of the tools used by persons looking for jobs and used by employers who are looking for employees is a resume. Most private employers and public agencies will also require that an applicant fill out a specialized application form for the given position or for the company or both. It is essential that the specialized application forms be filled out with some care. This does not negate the need for a good resume.

A resume is your opportunity to present yourself in the most positive way possible on paper. Designing the resume to do this is up to you. The student placement office at your postsecondary education institution can give you a good resume writing guide. The format of a resume can vary a great deal, and the organization of the material presented can vary also. Generally speaking, a disabled person should make decisions about how to write a resume and how to present the information based on the same criteria that a nondisabled person would.

There is one question that is commonly asked by disabled persons writing resumes. What should I say about my disability, if anything? And there is no simple answer to this question. It may be necessary to try one approach. If it does not work, try another.

One general guideline should be followed. Do not present your disability as an apology or an excuse. It is not necessary to talk about health on most resumes. If you do, do not use this section to talk about your disability. A fairly certain way to get yourself eliminated from consideration for a position is to write on your resume: Health, excellent. I am a paraplegic and use a wheelchair.

It is illegal for most employers to ask on the application form, "Are you disabled? Specify: _____." It may also be illegal for an employer to ask, "Do you have a disability that would prevent you from doing this type of work?" The fact that some questions may be illegal does not necessarily prevent their appearance on application forms. Therefore, application forms may contain questions that are difficult to answer without indicating that you are disabled. It may be desirable to indicate the disability either on the application form or in a resume. Then it is important to find a way to show the disability in such a way as not to get yourself eliminated from further consideration.

Some disabled persons insist that it is better not to let the disability show on the resume or application form at all. If you are a graduate of the state school for the deaf or blind, this may be difficult, for it is standard procedure to list the high school from which you graduated. One person said he sent out 150 resumes that showed his disability and got not one single interview. He then rewrote his resume leaving out all mention of disability and he sent out 150 to the same personnel offices. As a result of this second mailing, he scheduled ten interviews. If this man's experience is typical (and it is unclear whether it is) then it would provide some evidence that the disability on the resume prevents interviews and other follow-up with employers.

There are others who maintain that, if presented properly, the disability can be an asset on a resume. This may be particularly true in certain companies or governmental agencies that have very poor affirmative action records in hiring the disabled. It may also be more effective for individuals applying for some kinds of work than those applying for other kinds.

If the disability does appear on your resume (you list having attending a rehabilitation center for the deaf or blind, you list high school graduation from a special school, etc.) then it is probably desirable to take care to list some other activities that are not likely to be considered traditional for the disabled. (I coached a baseball team of high school students one summer while I was in college; I spent part of the summer building a garage.) This type of experience helps to balance any resume and can be extremely significant for a disabled person.

If you became disabled as an adult, it may be helpful to explain any gaps in your employment and your education experience which occurred as you adjusted to your disability. A recent graduate from law school used this paragraph to account for seven years. The placement office at the law school recommended that this period simply be ignored. The blind lawyer found that his resume was being ignored. Therefore, he inserted the following paragraph:

> *In 1970 I became totally blind. This was a severe shock to me and I quit my job. It took me some time to adjust to the fact that I would never be able to see again. After a period of discontent and a period of rehabilitation, I went into business for myself. I gradually learned that blindness need not be a major problem. Techniques and equipment exist that make it possible for a blind person to function actively in most activities. I also realized that I still had my most valuable resource, the same amount of good sense and intelligence I had as a sighted person. I then decided to go to law school and found the demand challenging and stimulating. Since graduation from law school I have been doing legal research.*

A resume needs to be a document which will open doors to further interviews and employment opportunities, not close those doors. The real test of how effective your resume is has to do with whether or not it produces results. If it doesn't, start over and try a different approach. If it gets results, it must be a good resume!

* * *

Source: Postsecondary Education and Career Development--A Resource Guide for the Blind, Visually Impaired, and Physically Handicapped. Baltimore, Maryland: National Federation of the Blind, 1981, pp.95-7.
Available from: National Federation of the Blind, 1800 Johnson Street, Baltimore, MD 21230.

This valuable resource provides insight on the problems faced by blind and otherwise physically handicapped individuals seeking higher education and offers answers and solutions. Information on Section 504 and other legislation is an essential part of this handbook as well as information on resources, on obtaining and making use of modern technology that is helpful to handicapped students, and on funding for various needs of the handicapped.

## JOB INTERVIEWS: SPECIAL CONCERNS OF DISABLED INDIVIDUALS

1. What employers often think
   A. Consider individuals' limitations, instead of their abilities
   B. Worry about accidents
   C. Worry about rates they pay for insurance
2. Behaviors which disabled individuals can exhibit during the interview
   A. Discuss the disability early in the interview, especially if it is visually apparent
      1.) Use clear, easy to understand terms
      2.) Do not use medical or psychological jargon
      3.) Explain your disability in such a way that the interviewer knows that you can do the job
      4.) Try to describe your problem with positive qualities
      5.) Describe how the disability occurred
         a.) Congenital
         b.) Accidental injury: (1) A long time ago, (2) Recently
         c.) Disease
      6.) Describe any physical limitations
         a.) Standing
         b.) Sitting
         c.) Walking
         d.) Lifting
         e.) Visual
         f.) Hearing
         g.) Speech
         h.) Breathing: (1) Allergies, (2) Out-of-reach
         i.) Coordination: (1) Eye-hand, (2) Eye-foot
         j.) Finger dexterity: (1) Fine, (2) Gross
      7.) Describe the condition of your disability
         a.) Improving
         b.) Not changing
         c.) Progressive (rate at which it is getting worse)
      8.) Discuss how you have been able to compensate for your disability
      9.) Discuss your good vocational record
         a.) Few days missed due to illness
         b.) Arrive early for work
         c.) Present facts about quantity and quality of previous work
      10.) Discuss your reliable source of transportation or your ability to drive
      11.) Demonstrate special skills you have developed to compensate for your disability
         a.) Use of prosthetic devices
         b.) Use of wheelchair
         c.) Other unique skills
      12.) Discuss architectural barriers, if they are going to be a problem
         a.) Doorways
         b.) Curbs
         c.) Stairs
         d.) Elevators
         e.) Parking spaces near place of work
3. Always stress your abilities and qualificaitons, not your limitations, regardless of your disability
   A. Face reality and discuss the problem
   B. Stress positive aspects which you have learned to use to compensate for your disability
4. Discuss you vocational objectives
   A. Short-term
   B. Intermediate
   C. Long-range
5. Discuss specific experiences which you have had that better enable you to perform the job which you are seeking
   A. Personal
   B. Educational
   C. Work experience
   D. Training
6. Use references who will present your disability as favorably as possible

* * *

Source: Tesolowski, D.G. Job Readiness Training Curriculum. University of Wisconsin: Stout Vocational Rehabilitation Institute, Materials Development Center, 1979, pp.55-6.
Available from: Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, Wisconsin 54751.

This source presents materials designed to train clients in job/employment readiness skills such as interviewing, self-appraisal, and finding and maintaining a job. Masters for overhead transparencies and work sheets for students are included. The Materials Development Center has reprinted this fine doctoral dissertation by D.G. Tesolowski of Florida International University in order to make it readily available to rehabilitation and career development professionals.

R 114 Research Coordinating

# NEWSLETTER

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Division of Occupational Education Planning, Research & Evaluation
Albany, New York 12234

Vol. 13 No. 6 November/December 1980

## Career Counseling & Job Placement of Disabled Students at Two-Year Colleges: A Guide

Edited by Jay Watkins, a guide has been produced at the Institute for Research and Development in Occupational Education (IRDOE), Center for Advanced Study in Education, at the Graduate School and University Center of The City University of New York. The SED-authorized and VEA-funded projects (79-3E-820 HA and 80-3E-1158) cover these topics: counseling services for the disabled client, job placement of disabled students, de-stereotyping, familiarizing the employer with alternative accommodations, development of job seeking skills, and helping prepare for the job interview.

The authors, David Katz, Bert Flugman, and Leo Goldman, have provided valuable indices which include an annotated bibliography. The manual itself can be of value in secondary school and college placement practices and in many other ways, e.g.:

- As a resource for fulfilling Section 504 requirements of the Rehabilitation Act of 1973.
- As a guide for inservice training of student personnel staff.
- As a resouce for increasing the employment potential of disabled students.
- As a resource for sensitizing the college community to the needs of disabled students.
- As a guide for fostering college and industry partnership activities.

Although much of the information is geared to the needs of the disabled, the Guide's point of view is that disabled workers must develop the same basic skills that nondisabled workers need in order to be competitive in the job market.

Much of the material in the document is presented in the format of interchange among college staffs, employers, and students. This format reflects the origin of much of this material in workshops, conferences, and training programs. In this format concerns are articulated, the alternatives are presented, the issues are debated, the questions are answered where possible, and the facts are listed. All of the anecdotes and experiences presented in the Guide are real.

Further information is available from ERIC, or from David Katz at IRDOE, 33 W. 42 Street, New York, NY 10036.

# CAMPUS PUBLICATIONS

*We know what the International Year of Disabled Persons can be. It remains to be seen what it will be.*

*— Mary Schum, Editor, Affirmative Action Newsletter, Broome Community College*

SELECTED PROJECTS AND PROGRAMS AT NEW YORK STATE TWO-YEAR COLLEGES

The following were projects nominated for Showcase '80 and Showcase '82, funded dissemination projects conducted by the Two-Year College Development Center. They are listed here as peer resources that the reader may wish to contact.

- "Special Services for Disadvantaged Students;" Kingsborough Community College; contact person, Dr. Alfredo Torres.
  The Special Services Project is a dual faceted program designed to service the physically and emotionally disabled as well as the linguistically disabled: these populations require very different types of services and treatment.

- "Occupational Decision-Making and Career Development for Special Needs Community College Students;" Kingsborough Community College; contact person, Dr. Natalie Rubinton.
  The principal goal of this project is to facilitate the career preparation of handicapped students in the community college through educational-vocational counseling and other related guidance activities.

- "Career Counseling and Work Experience Program for Handicapped Students;" Monroe Community College; contact person, James A. Terrell.
  The purpose is to provide career counseling and development activities for handicapped students, most of whom have had extremely limited experience in the world of work. Students with disabilities are placed in internship settings related to their career interest patterns.

- "VEA Program for Deaf Adults for Business and Industry;" New York City Technical College; contact person, Jeanne Dworkin.
  The philosophy of the program is to adapt the I.E.P. to adult training of deaf and hearing impaired adults. The primary objective is to succeed with each individual and to start him/her on a path to vocational competence.

- "External Education Program for the Homebound;" Queensborough Community College; contact person, Merrill D. Parra.
  Through the use of 45 conference telephone units, permanently installed on campus, severely disabled homebound students are able to participate in a fully accredited program of study leading to the associate degree in Business and Career programs in Accounting, Data Processing and Secretarial Science.

- "Pre-College Orientation Program for Blind and Visually Disabled Students;" Queensborough Community College; contact persons, Irving L. Slade, Patricia J. Evanoski.
  The Pre-College Orientation for Visually Disabled students is designed to provide students with a realistic introduction to college life and the sighted world, to academic expectations and to general education and career information.

- "Improved Program Access for Disabled Students;" Center for Developmental Studies, SUNY Agricultural and Technical College at Alfred; contact persons, Grace E. Barton or Kathryn Fosegan.
  This project works with faculty awareness and coordination as well as providing direct instructional assistance to students with disabilities, particularly those with learning disabilities.

* * *

# State University of New York at Albany

## AWARENESS DAY PROGRAM

### PRESENTATION
(Campus Center Assembly Hall)

9:00 a.m. OPENING REMARKS by President Vincent O'Leary

9:30 a.m. PAUL SMITH, Governors Advocates Office for the Disabled - "A Different Approach," film and discussion on attitudes toward disabled individuals.

10:30 a.m. NATALIE BACON and MARTIN BALL, Marist College - "Paralympics 1968 and 1972," films and talks on wheelchair sports.

11:30 a.m. GREGORY O'CONNOR, CRC, N.Y.S. Office of Vocational Rehabilitation - "Monkeys as Alternatives for Attendant Care."

12:00 noon FATHER ROBERT JORDAN, Episcopal Minister - Information on Hearing Disabilities and Demonstration on Sign Language.
NOTE: To be held in Fireside Lounge.

12:30 p.m. NELSON ARMLIN, Associate Director of Capital Area School Development Association - "I Am Not What You See: A Conversation with Sondra Diamond," film and seminar.

1:30 p.m. PATRICIA LILAC, N.Y. Association for the Learning Disabled - Presentation on Learning Disabilities.

2:30 p.m. NANCY POWHIDA, CRC, N.Y.S. Office of Vocational Rehabilitation; and THAD RAUSHI, Counselor, Schenectady Community College - Discussion on Psychiatric Disabilities.

3:30 p.m. OPEN MEETING

### ON-GOING EVENTS
9:30 am - 3:30 pm

* AWARENESS-RAISING MOVIES (Fireside Lounge)
* DISCUSSION ON THE USE OF GUIDE DOGS AND WHEELCHAIRS, Given by students (Fireside Lounge)
* TRY A WHEELCHAIR: TRY A CANE AND BLINDFOLD (Campus Center 1st Floor Main Lounge)
* SUPPORT UNIVERSITY ACTION FOR THE DISABLED AND BUY A T-SHIRT--Student Association Funded (Campus Center 1st Floor Main Lounge)
* ACCESSIBLE VAN WITH HAND CONTROLS DISPLAYED BY STUDENT (Podium, Directly Behind Campus Center)

NOTE: An interpreter for the deaf will be present all day.

Transportation by a van with a wheelchair lift is available upon request. For further information call 457-1295.

DISABLED STUDENT SERVICES

and

LEARNING RESOURCES COMMITTEE

are co-sponsoring a Faculty/Staff

Development Workshop

April 29, 1982

12:15 - 2:00 p.m.

Large Lounge - Commons

The object of the workshop is two-fold:

1. To inform the College Community of the services available on this campus for the disabled.

2. To learn more about Learning Disabilities, how to detect them, and their emotional and physical effects on the student.

Interested students are invited.

Fresh fruits and beverages will be provided.
You are welcome to bring lunch.

Program outline printed on back.

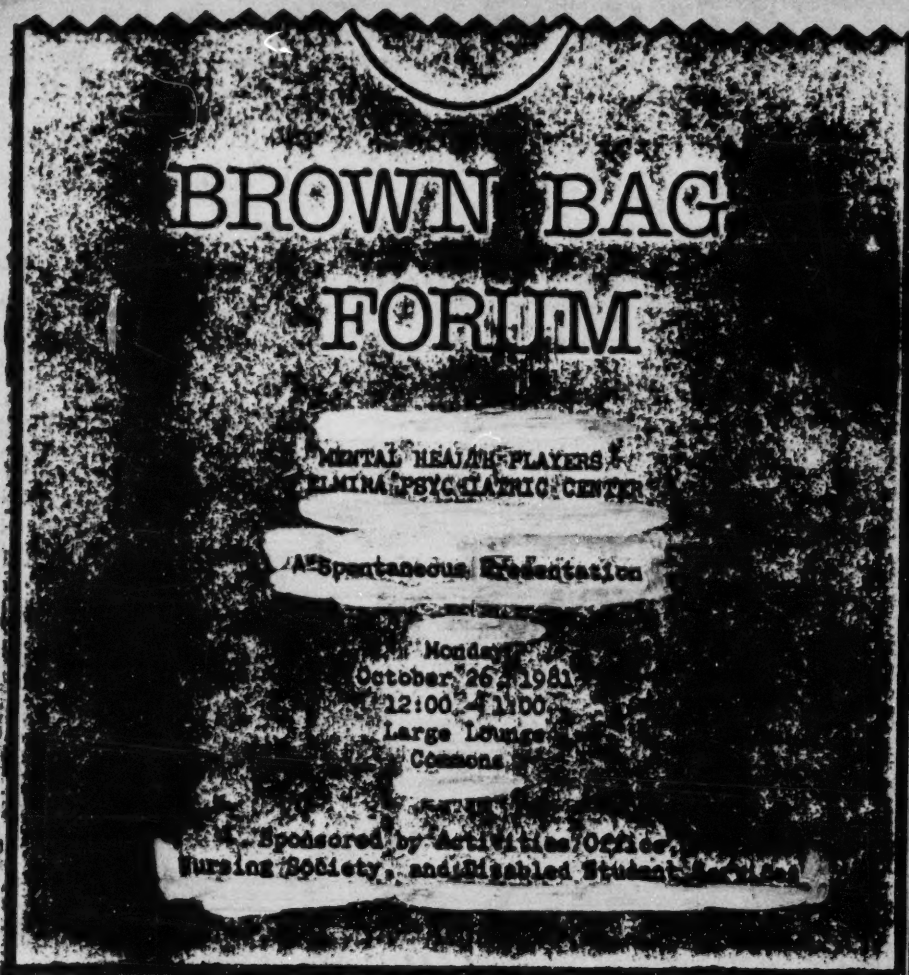
corning community college

Corning, New York 14830
607-962-9011

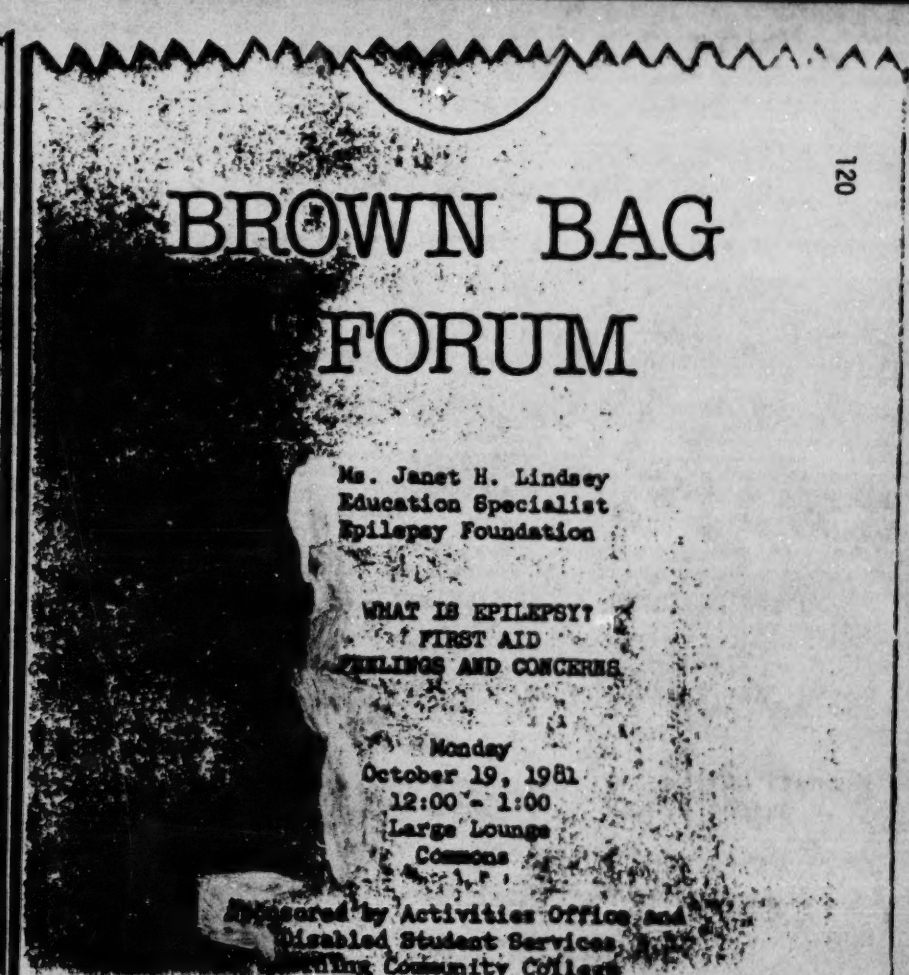


PROGRAM

| | | |
|---|---|---|
| 12:15 - 1:00 | -Welcome | John Orser |
| | -Disabled Student Services | Meta Spiegler |
| | -Counseling | Jane McGarry |
| | -Health Services | Arlene Updyke<br>Dr. Milton Lapp |
| | -Rights of Privacy Act | Jack Kelley |
| | -Computer Identification | Nancy Reisbeck |
| | -Library Resources | Barbara Hornick-Lockard |
| | -504 Regulations | Anne Cohn |
| 1:00 - 2:00 | Alice Rahill, Psychologist<br>"Learning Disabilities" | |


BROWN BAG
FORUM
MENTAL HEALTH PLAYERS
ELMIRA PSYCHIATRIC CENTER
A Spontaneous Presentation
Monday
October 26, 1981
12:00 - 1:00
Large Lounge
Commons
Sponsored by Activities Office,
Nursing Society, and Disabled Student

players
population to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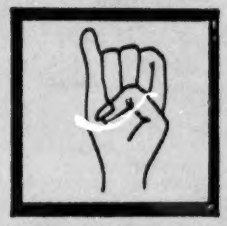
BROWN BAG
FORUM
Ms. Janet H. Lindsey
Education Specialist
Epilepsy Foundation
WHAT IS EPILEPSY?
FIRST AID
FEELINGS AND CONCERNS
Monday
October 19, 1981
12:00 - 1:00
Large Lounge
Commons
Sponsored by Activities Office and
Disabled Student Services,
Community College

# SPECIAL PROBLEMS AND SPECIAL SOLUTIONS



OFFICE OF SPECIAL SERVICES
STATE UNIVERSITY OF NEW YORK AT FARMINGDALE

## A FACULTY GUIDE



## INTRODUCTION

The enactment of Section 504 of the Rehabilitation Act of 1973 mandates some fundamental changes in policies, action and attitudes of institutions receiving federal financial assistance.

One of the results of this legislation is the increased responsibility of S.U.N.Y. at Farmingdale to provide opportunities for higher education to disabled students. Frequently, such provision requires physical and attitudinal alterations in the classroom -- reasonable accomodation to a variety of special needs.

During the past few years, S.U.N.Y. at Farmingdale has built a wide and excellent reputation, not only for providing accessible higher educational opportunities for disabled students, but for readiness and flexibility in coping with the special needs of this growing segment of the student body.

We can be proud of our reputation, and this booklet has been prepared in the interest of remaining a leader and innovator in this area. The faculty at S.U.N.Y. at Farmingdale has, in the past, been far more than just "cooperative;" this booklet supports and encourages the creativity, awareness and interest which is already in abundant evidence.

# QUESTIONS FREQUENTLY ASKED

WHAT IS THE BEST SINGLE SOURCE OF INFORMATION ABOUT THE NEEDS OF THE HANDICAPPED STUDENT?

The best information comes from the student, who most often knows first hand his/her own abilities, disabilities and needs. On request from the faculty member or student, the Office of Special Services and Health Services are available for assistance in problem solving.

HOW DOES A BLIND OR VISUALLY IMPAIRED STUDENT OBTAIN TAPED TEXTBOOKS?

If a student who cannot use regular texts is registering for your class, you may be contacted before the semester begins. Office of Special Services maintains a liaison with Recordings for the Blind, which has thousands of titles on file. If duplicate tapes are not immediately available, a six to eight week delay occurs -- so, early decisions about texts are helpful.

WHAT IF MY ASSIGNED ROOM IS NOT ACCESSIBLE TO THE STUDENT?

Most access problems are corrected prior to the first day of class. During pre-registration, the Registrar and Special Services consult with students and advisors to diagnose any problem connected with scheduling.

Department Chairpersons and advisors should remember to mark "DISABLED" or "WHEELCHAIR" on the pre-registration forms, so that the Registrar is alerted to special needs.

If access problems arise during drop-add day or late registration, Special Services will try to arrange room changes; however, often a simple room exchange can be effected by consulting with faculty colleagues and notifying the Registrar of the change.

WHAT ABOUT BRAILLE?

Many blind students do not use Braille at all, or not extensively enough to read textbocks. If the student requests it, hand-out materials, course outlines, tests, etc. can be transcribed into Braille by volunteers.



IS THE STUDENT WITH EPILEPSY SUBJECT TO SEIZURE IN THE CLASSROOM?

Most individuals having epilepsy or related disorders take medication to control or reduce the frequency of seizures. However, seizures can be triggered by emotional stress which may be associated with being called on in class or with examinations. Seizure disorders take many forms -- if a student in your class has this condition and you would like further information, Health Services can provide it.



HOW DO I IDENTIFY THE HANDICAPPED STUDENTS WHO ARE NOT VISIBLY DISABLED?

A simple question on the first day of class will give students the opportunity to identify any problem or special need which might affect their performance. If a student chooses to remain silent, the responsibility for coping remains exclusively his/hers.

Some instructors find that handing out index cards on the first day of class permits disabled students to identify their special needs confidentially and comfortably.

HOW WILL A BLIND STUDENT READ THE BLACKBOARD?

He cannot. Try to remember to say the words as you write them, and try to avoid pointing to what you've already written without identifying it while explaining blackboard work. Also, it's helpful if you spell out names or other new vocabulary while you're writing.

MY DEPARTMENT HAS A POLICY THAT IN-CLASS ASSIGNMENTS AND EXAMS MUST BE TIMED. WHAT ARRANGEMENTS DO I MAKE FOR THE STUDENT WHO HAS IMPAIRED HAND FUNCTION??

Consider what the assignment is supposed to measure. Then, work with the student and the department to find a fair way to evaluate the student's ability or knowledge.

STUDENTS WHO USE WHEELCHAIRS ARE OFTEN LATE. WHY?

Traveling by wheelchair takes longer than walking. Parking can also be a problem if the handicapped reserved spaces are illegally occupied. But, chronic lateness is annoying, and should be discussed with the student to see if there might be other steps to be taken to overcome the problem.

DOES THE HANDICAPPED STUDENT GET BY WITH LESS WORK?

Not Less work. The handicapped student often works harder. Because of physical or sensory limitations, the student may have to use different methods of responding to class assignments. Assignments and exams which are equivalent to regular class work may have to be arranged.

DO STUDENTS WITH DISABILITIES MISS MORE CLASSES THAN OTHERS?

Many disabled students use mobility aids, and have trouble walking securely when the weather is inclement -- rain or ice on sidewalks and roadways creates hazardous conditions.

Students with mobility impairments often rely on elevators for access to classes in certain buildings -- if elevators are not functioning, the student cannot get to class.

WHAT TYPES OF DISABILITIES MIGHT BE ENCOUNTERED BY INSTRUCTORS?

There are as many types of disabling conditions as there are handicapped students. Each one is unique, and most have more than one functional limitation. The most common limitations include visual impairments, mobility impairments, hand dysfunctions, and speech and hearing deficits.

WHAT CAN THE INSTRUCTOR DO TO BRING ABOUT CHANGE ON THIS CAMPUS?

Understand that the disabled student wants an EQUAL CHANCE, not a SPECIAL ADVANTAGE.

Try to see the individual student's point of view. The disabled student relies on your understanding, creativity and flexibility to make classwork, equipment and experience accessible to him/her in ways which are fair and reasonable.

Feel free to make contact with the disabled student's counselor in the Office of Special Services, whether you want simple confirmation of your understanding of the student's special needs, or you need some ideas and suggestions about how to adapt your course work and course requirements.

# OUT-OF-CLASS EXAMINATIONS

## SUGGESTIONS AND PROCEDURES FOR FACULTY AND DISABLED STUDENTS

At the beginning of the semester, it is the student's responsibility to approach the instuctor and inform him/her of the particular problem(s) which can be anticipated with regard to participating in classroom assignments and especially with regard to taking examinations. If, from experience, the student or the instructor can offer one or more solutions to the problem(s), it is appropriate to do so at this time.

Example: John W., a student who, because of extreme muscle weakness (specific diagnoses are rarely necessary) has impaired writing ability. He tells his instuctors on the first day of class, "If there are minimal notes in class, I can manage--if there are a lot of facts to record, or diagrams to copy, I can't keep up, so I use a tape recorder for my notes, and sometimes I ask one of the other students to make a carbon copy of any diagrams or graphs. If you give multiple choice or fill-in exams, I can take them with the rest of the class at no disadvantage, but if there are essay answers, I will need extra time as I write very slowly and tire easily. If there's an empty room nearby, I can bring my electric typewriter for the essays and take the exam in the same amount of time as the rest of the class."

If a student cannot complete the exam in the allotted time, one option is for the student to complete the exam in the instructor's office during office hours. This option is often preferred, because there is no delay in getting the exam back to the instructor to be graded with the others.

Many students require more than just extra time. Students with specific learning disabilities, or visual impairment, or cerebral palsy, may not be able to read the exam adequately. They may require a reader, or, if sufficient time is allowed, the Office of Special Services will transcribe the exam into Large Print or Braille, or onto tape. Some students may not be able to write their own answers. Many options exist for this problem--the student may be able to type, or can dictate his answers to a typist or a handwriter, or onto tape. Some students are willing to take exams orally, while for others this option should be avoided.



as it provokes much anxiety. If there is no way for the instructor to provide the extra time or special equipment or circumstances required by the particular disabled student, then arrangements can be made for the student to take the exam, or any part of it, through the Office of Special Services. If this arrangement is decided upon, the following procedures are in order.



A. Arrangements should be made AT LEAST 2 DAYS ahead of time, so that space and proctoring can be made available. This is the student's responsibility, (assuming that the exam is announced far enough ahead.) If the instructor plans a surprise quiz, s/he can call Office of Special Services to arrange for the student to take the quiz there.

EVERY EFFORT WILL BE MADE TO PERMIT THE DISABLED STUDENT TO TAKE THE SAME EXAM AT THE SAME TIME AS THE REST OF THE CLASS.

B. The exam itself should be delivered to the Office Of Special Services, sealed in an envelope. The instructor may prefer to deliver it personally, or may send it by student aide. If neither is possible, call Office of Special Services and we will try to pick it up. Please write the following information on the exam or attach it: Instructor's Name
Instructor's Telephone Extension
Name of Course
Building & Room to which the completed exam is to be deliverd.
time limits, use of materials such as notes, texts, calculators, etc. If no instructions are given, we will take the student's word.

C. The student will take the exam, according to whatever instructions are given. There will be either a Special Services staff member or student aide available to monitor the exam (Student aides in the Office of Special Services receive orientation to the regulations listed here, and are utilized in testing situations requiring simple monitoring with minimal or no interaction. Where there is a need for interaction,

*such as reading, writing from dictation, etc., Office of Special Services will determine the preferability of providing staff monitoring. The instructor is welcome to make known his/her requirements in this kind of arrangement.)*

*D. The student will be provided with as quiet a work space as is possible within the limitations of the office. If no space is avialable, or if the student needs a special environment or special equipment, the Office of Special Services will arrange to have the student take the exam in the Library or Learning Lab and will provide monitoring.*

*E. The Monitor will see that any special conditions or instructions given by the instructor are followed.*

*F. The monitor will report, in writing, to the instructor, any unusual circumstances which may occur during the taking of the exam.*

*G. When the student has completed the exam, the monitor will seal it in an envelope, and the Office of Special Services will return it to the instructor as soon as possible.*

*If at any time a student or faculty member has questions about the special arrangements necessary to permit a disabled student to participate in and be tested on course material, the Office of Special Services is available. The Office of Special Services will cooperate with any reasonable arrangement, or will make suggestions where no obviouse solutions seem to exist.*

*OFFICE OF SPECIAL SERVICES:*

*Ms. Barbara Tierney, Acting Director.....2268*
*Ms. Jane Rosen, Counselor.....2692*
*Ms. Patti Specter, Counselor.....2063*
*Mr. Dudley Reid, Technical Assistant.....2292*



## FOR HEARING AND SPEECH IMPAIRED STUDENTS.....

*When a student is deaf or hard-of hearing, s/he may depend on sign language and need an interpreter in class, for appointments, and in other academic situations. Many deaf students do not use sign language and depend solely on lip-reading, which means getting only 35-40% of what's being said--the rest must be pieced together from context.*

*The hard-of-hearing student may have trouble with new vocabulary presented in class, and may miss the point entirely from movies or slides shown in class where there is a narrator whose lips can't be seen.*

*The student may have some speech problems which make it difficult to speak out in class, ask questions, or take oral exams.*

*The student may not understand assignments thoroughly if they are not written down.*

## .....Instructors can.....

Try to give assignments in written form, either as hand-outs or from the blackboard. An outline of the course, including assigned textbook reading, provided during the first week of classes, will be most helpful to the deaf student, for it will enable him/her to become familiar with new vocabulary and concents before going to class, which makes lip-reading more effective.

Write new vocabulary out on the blackboard (it helps the non-hearing-impaired students as well!)

If your grading system includes class participation, try to discuss with the student what level of class participation can be reasonably expected. If the student cannot participate, consider extra work in another area related to course content.

Remember that the deaf student who depends on lip-reading can only "read" you when s/he can see your mouth. There is no need to speak more slowly or distinctly than usual -- as long as you don't rush or mumble, the lip-reader will follow you. It's good to keep in mind, however, that a bushy moustache or a pipe makes it difficult for a deaf person to lip-read effectively.

Some students, who have been deaf or hearing impaired since early childhood will have problems with written English as well as with the spoken word, and these difficulties may show up in essay answers on exams. Try not to penalize the student for faulty grammar when grading essays. (However, if the deficit in written expression is severe enough to prevent you from estimating the student's familiarity with and grasp of course material, it may be fairer to both of you to arrange for an alternate means of testing.)



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# FOR STUDENTS WITH VISUAL IMPAIRMENT.....

*Legal blindness covers a broad range of visual acuity, from total blindness to very useful partial vision. In fact, many people who are "legally blind" because their vision is impaired in a particular way, have difficulty explaining their handicap to others because they seem to function so well. Some students with excellent residual vision do not need the assistance of a guide dog or cane to walk around campus safely and comfortably; yet, they cannot use regular printed textbooks and classroom materials, or read the exams, or see the blackboard. Certain laboratory equipment or items such as meters, tiny printed circuitry, or surveying equipment, may not be accessible to a visually impaired student, while other students with poor color discrimination may need to devise special methods of handling colored wiring or textbook illustrations which are color coded.*

*Probably the most important thing to realize about the partially sighted "legally blind" students is that each one will have different abilities and different needs. Some will be rather creative in adapting alternate means of processing information, while others will need more help and suggestions from their instructors and from Special Services.*

*Totally blind students may or may not use Braille. Even for those students who can use Braille effectively, the equipment necessary for taking notes in class is bulky and sometimes distracting for other students nearby. The vast majority of totally blind students depend heavily on tape-recorded notes, alone, or in combination with carbon-copy notes taken by a fellow student (this is generally necessary for courses which include alot of blackboard work, new vocabulary, diagrams, graphs, etc.) The blind student must then depend on readers to explain any written material obtained in class, as well as for any library work, reserve reading, research, etc.*

*Most totally blind students require a thorough and time-corsuming orientation to the physical campus, and may be late to classes until they know their way around with confidence.*

*Blind and partially sighted students tend to rely heavily on taped textbooks which may take 6-8 weeks to transcribe. In the meantime, they must rely on readers for all required reading.*

*Since most blind students cannot hand-write exams, special arrangements must be made for readers, writers, taping, etc.*

## .....Instructors can.....

Feel comfortable discussing, early in the semester, the individual difficulties and needs of the student. Anticipate which course requirements may have to be adapted or substituted for. Establish early contact with the Office of Special Services to plan for adaptations, transcription of materials, special arrangments for testing, etc.



Make your textbook choices early so that orders can be placed for tapes.

When you use the blackboard, try to remember to say what you write, so that the blind student can follow.



When possible, arrange to give the student extra help in dealing with class materials which are predominantly visual and need explanation. If this can't be done in class, perhaps you can arrange a few minutes after class on a regular basis, or set up a regular office visit. When you see the need for a great deal of specialized attention, alert the Office of Special Services.

Where possible, and within reason, allow extra time for assignments, remembering that for a blind student, the process of research, outside reading, etc. will involve scheduling of readers and more time than for a sighted student.

# FOR STUDENTS WITH IMPAIRED HAND FUNCTION.....

*When a student's hand function is impaired, s/he may not be able to write at all. S/he may be able to write, but slowly, or only for short periods of time, with frequent rests. S/he may not be able to manipulate classroom materials or laboratory equipment, and may not be able to turn the pages of textbooks, much less flip through card catalogues, abstracts, or required reserve reading. S/he may not be able to take class notes in the usual manner.*

## .....Instructors can.....

Understand the use of tape recorders in the classroom. Most students who rely on taped notes don't save the tapes -- it's too bulky and time consuming. They usually listen to the tape once or twice and abstract the information they feel is important, just as other students do when they take notes in class.

Try to adapt situations which require handwriting by permitting extra time on exams and for research or by giving oral exams.

If the student wishes to have other students in class take notes for him/her using carbon paper, you can help by asking for volunteers who take good notes.

Where a hand dysfunctional student can't manage certain equipment, see if the Office of Special Services can arrange for an adaptation. If that's not possible, consider an equivalent but different assignment, such as eliminating the usual performance requirement and holding the student responsible for a verbal description of the process, as well as for the information gained from the performance. (For instance, a Liberal Arts student with hand dysfunction takes biology to satisfy the science requirement, but is unable to do the actual dissection of a frog. However, s/he can observe the dissection as performed by other students, and be responsible for the same information as the rest of the class.)

# FOR STUDENTS WITH IMPAIRED MOBILITY.....

*Students with mobility impairments may use wheelchairs, crutches, walkers and canes. Their mobility may be slower than that of an able-bodies student, so getting from class to class may take longer than usual.*

*Not all buildings on campus are accessible to mobility impaired students and in others access depends on elevators, which may break down.*

*Library materials may be difficult to reach independently, and laboratory tables and equipment may not be designed for effective use by students in wheelchairs.*

*Fieldtrips may be planned to inaccessible sites, or may require special transportation. Instructors' offices may be in inaccessible buildings. Rain, snow, and ice may constitute hazards, and can even preclude attendance for some students.*

## .....Instructors can .....

Cooperate with room changes at the beginning of the semester in order to accomodate mobility impaired students.

Understand that lateness, or even absence, on the part of mobility impaired students may be caused by hazardous travel conditions or broken elevators. (Of course, it is the student's responsibility to obtain missed notes and work from the instructor or from other students when a class is missed.)

Help the student to make minor adaptations in classroom or laboratory equipment. When necessary, contact Office of Special Services for more complex adaptations.

Agree to meet the student in a mutually convenient location if your office is inaccessible.

When arranging field trips, check for information about accessibility. If special transportation is necessary, give the student enough extra time to make independent arrangements.



***YOUR RESOURCES ON CAMPUS ARE:***

***OFFICE OF SPECIAL SERVICES:***
***Ms. Barbara Tierney, Acting Director.....2268***
***Ms. Jane Rosen, Counselor.....2692***
***Ms. Patti Specter, Counselor.....2063***
***Mr. Dudley Reid, Technical Assistant.....2292***

***PLACEMENT***
***Mr. Steve Bancroft, Placement Coordinator.2163***

***HEALTH SERVICES***
***Ms. Wilma Siecinski, Nurse/Administrator..2009***

***ACADEMIC SERVICES***
***Dr. Nancy Thomson, Acting Dean.....2143***

**OFFICE OF SPECIAL SERVICES**
**STATE UNIVERSITY OF NEW YORK AT FARMINGDALE**

**Published as part of Grant #4640033B**
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Broome Community College Binghamton, NY
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# ACTION

Published jointly by the Affirmative Action Office and the LRC

## WHAT IS ACTION

It is a newsletter about Affirmative Action . . . and issues that affect our campus community.

We will digest the deluge of Affirmative Action news coming from Washington, Albany, various commissions and concerned organizations, and present you with relevant and pertinent material. Plus, we will offer a few thoughts to ponder.

ACTION is part of BCC's celebration of the International Year of Disabled Persons (see articles on Page 7 of this issue).

Your comments, suggestions and contributions are invited.

## DRUG ADDICTS GIVEN A BETTER CHANCE

The State Division Of Human Rights has ruled that drug addiction is a "disability" within the meaning of the Flynn Act. The Act makes it unlawful, discriminatory practice for employers to refuse to hire, or to fire, individuals on the basis of age, race, creed, color, national origin, sex, or disability. A person undergoing treatment for drug addiction, is therefore, protected under the Human Rights Law unless it is proven that the disability prevents the individual from performing in a reasonable manner, the activities involved in the job or occupation. A similar ruling in 1978, recognized alcoholism as a disability.

## AFFIRMATIVE ACTION (FOR DISABLED) LEADS TO CAREER OPPORTUNITIES

During the next five years there will be a need for 10,000 interpreters for the deaf. There are now only 3,000 registered and certified interpreters. Thus, this is a growing field, according to Richard Dirst, Public Relations Director of the National Registry of Interpreters for the Deaf (NRID). In order to meet the need, US Department of Education has recently funded ten new interpreter training centers offering a variety of programs. The centers are located at Universities of Arizona, Tennessee, South Florida, Wisconsin at Milwaukee; Ohlone and Delgado Colleges; Johnson County, and Seattle Community Colleges; and St. Paul Technical and Vocational Institute. There are about fifty other interpreter training programs in the United States. Career opportunities for interpreters include freelance work as well as full-time employment by school systems, courts, federal and state agencies. For more information consult (for your federal region) the Regional Directory of Services for Deaf Persons, published annually. Each is available for $2.00 plus 50¢ postage from NRID, 814 Thayer Avenue, Silver Spring, MD 20919.

Point of Interest: Dr. Peter Blomerley, former BCC President is now President of Ohlone College, California.

DISABLED STUDENT SERVICES

# OUTLOOK

STATE UNIVERSITY OF NEW YORK AT ALBANY

Volume 2, Number 1 September, 1981



## COORDINATOR'S CORNER

It is hard to believe that it is September again and another school year has begun. Every year at this time, the same thoughts go through my head. I see our entering Freshmen arriving all smiles and full of optimistic feelings about what is yet to come. Sophomores and Juniors return with an air of maturity that descends after having completed that first critical year. Some are sadder but wiser and others are just wiser; knowing now what it takes to get by.

The college experience is unique for many reasons. Nowhere else is there an atmosphere which is so charged with ideas, opportunities, various kinds of people and assorted influences. No other time in life can you experience an environment with thousands of people in the same age group who represent countless walks of life and backgrounds. It is really quite exciting if you stop to think about it.

College is a time for learning how to make decisions. Critical decisions, in some cases, which could effect you for the rest of your life. More often than not, you have to learn how to make choices. Learn how to analyze a situation for possible outcomes. Instead of just acting or doing for no reason, now is the time to ask, "if I do this, then what are the possible ramifications of my action? What is the best that can happen? What is the worst? What is likely to happen?" For you see, now that you are in college you are considered an adult and as such, you will be treated that way. As an adult you and only you are responsible for your own actions.

All of this leads up to a fairly heavy responsibility on the part of the student. However, this is not a burden which you have to shoulder completely on your own. There are places on a campus, many places, which a student can turn to for aid and guidance. I urge you to remind yourselves when you need some support of the following. Places like Disabled Student Services, Counseling Centers, Advisement Offices, Dean of Students Office. Find a friend who is a member of the faculty or on the residential life staff. Seniors can be very helpful to newer students as can peer counselors.

Remember, it is your responsibility to find someone who can help you think things through when the going gets rough. None of us can make it completely on our own. "No man is an island..." It is not a sign of weakness to reach out to other people. My hope for you during this year is that you learn how and when to reach out and that you look for assistance from people who can provide what you need.

Until next month....

Nancy Belowich

# Disabled Student Services

The State University of New York at Albany Campus Center 137

## On the cover

On the cover: (Top) Wheelchair basketball, one of many leisure activities available to the disabled at SUNYA; (bottom left) SUNYA has now been made wholly accessible to the disabled; (bottom right) Debbie Hamilton, Class of '78, past president of Disabled Students Organization (UAD).

Remember, if you have any questions, please call us at (518) 457-3094 or write to Nancy Belowich, Assistant Dean for Student Affairs, 1400 Washington Avenue, State University of New York at Albany, Campus Center 137, Albany, New York 12222.

### Equipment Available

1. Talking Book Machine
2. SONY Tape Recorder 105 (reel to reel)
3. Cassette Playback Machine
4. Perkins Braille Writer
5. Large Print Typewriter
6. Webster's *New American Dictionary* and *New World Dictionary* (large print dictionaries)
7. Braille Typewriter
8. Braille Dictionary (Webster Student Dictionary, 36 volumes)
9. Table with hydraulic lift for wheelchairs — can go to any height.
10. Braille Label Maker
11. Telex (makes copies of tapes; reel to reel and cassette)
12. Talking Books, Tapes and Records
13. Catalogues of Tape Books
14. *New York Times Large Print Daily*
15. Braille Books (and catalogues)
16. Book Holders for Quads
17. Elastic Line Writing Guide
18. Magnifying Readers
19. Ulna Lamps
20. Booths with Earphones
21. Class Schedules and Class Catalogue in Large Print and Braille
22. Hoyer Lift for Swimming Pool
23. Visual Tek Basic Mini-Viewer
24. Electric Page Turner
25. Adapted Van
26. Edna-Lite
27. Dictaphone Recording Units
28. Braille Chess Set
29. Braille Scrabble Game
30. Braille Dominoes
31. Braille Playing Cards
32. Braille Backgammon Set

# About disabled student services at SUNYA

The State University of New York at Albany has been admitting and providing services for students with disabilities since the early 1960's. Since that time, hundreds of students with varying degrees of physical disabilities have been able to advance their education at the wholly accessible Albany Campus of the State University of New York.

SUNYA has long had a strong commitment to extending opportunities for the disabled, and the *Rehabilitation Services Program* in the Office of Student Life provides support to all components of the University as it pertains to the handicapped.

Initially established to provide aid and supportive services to persons with disabilities, the Rehabilitation Service Program has now developed into an extensive office which has broadened the scope of rehabilitation services to the entire University and the community at large. Aside from direct services to students, the Rehabilitation Services Program now provides assistance and support in several other categories, such as:

1) Consultation with academic and administrative departments, on program and architectural accessibility,
2) On going education to both the University and the Capital District area about the handicapped,
3) Purchasing of adaptive equipment to maximize the opportunity for success of disabled students and employees (A comprehensive list of available equipment is on the back of this sheet), and
4) Participation and support of local and national interests groups which represent the handicapped.

The Rehabilitation Services Office tries to remain flexible and sensitive to the needs of our community. We are located in room 137 of the Campus Center in the Office of Student Life. Further information can be obtained by calling (518) 457-3094, or by writing Nancy Belowich, Assistant Dean for Student Affiars, 1400 Washington Avenue, State University of New York at Albany, Campus Center 137, Albany, New York 12222.

**Caroline Forsberg - Visually impaired Doctoral student in the Educational Administration Program.**

# Some of the key services the Rehabilitation Office provides

1. Recruitment of readers, writers and tutors (academic aids).
2. Recruitment of attendants (personal aids).
3. Advocacy — on campus and with agencies such as OVR, CVH, Social Security and a host of others.
4. Personal orientation — to the campus.
5. Pre-registration
6. Counseling services.
7. Job readiness series — done in conjunction with the University Placement Services.
8. Braille phone directory.
9. Modified student housing.
10. Transportation — adapted minibus.
11. Faculty and community awareness — through lectures, development of publications and workshops.
12. Speakers bureau — a group of active students with disabilities who are available to speak in classes at workshops, both on campus and in the community.

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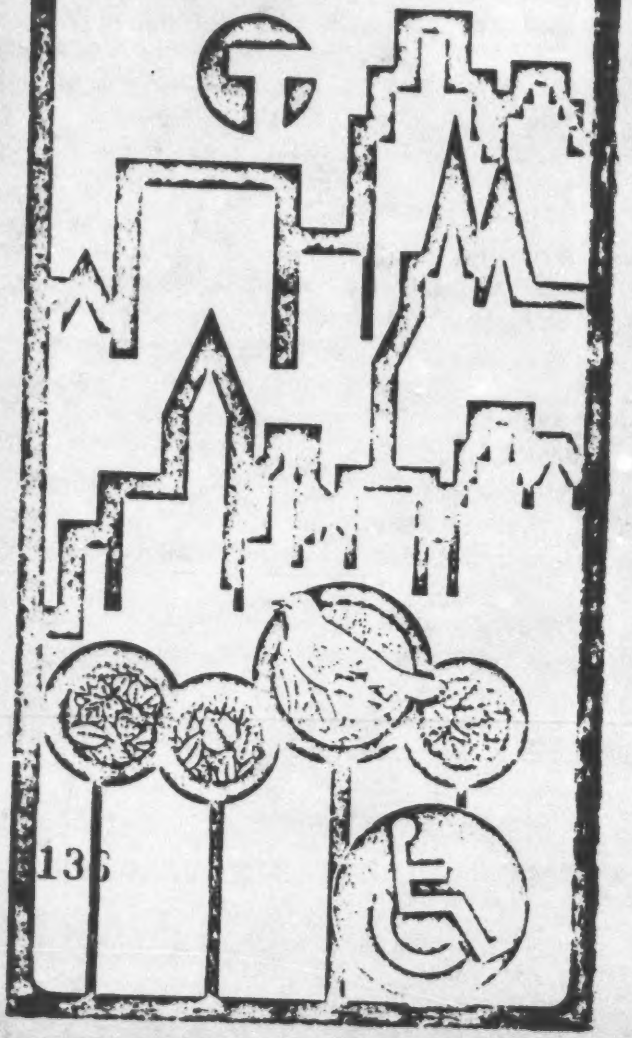
# Information for Students with Disabilities





The policy of this office is to provide services to assist you in gaining access to postsecondary education and to comply fully with Section 504 of the Rehabilitation Act of 1973 which states:

> No qualified handicapped student shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any academic, research, occupational training, housing, health, insurance, counseling, financial aid, physical education, athletic recreation, transportation, other extracurricular, or other postsecondary education program or activity to which this subpart applies (84.43 [a]).

Federal regulations define a "handicapped person" as one who: (1) has a physical or mental impairment which substantially limits one or more major life activity, (2) has a record of such impairment; or (3) is regarded as having such an impairment. Examples of disabilities include, but are not limited to: speech, hearing, visual or orthopedic impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, diabetes, heart disease, mental retardation, emotional illness, drug addiction, alcoholism and perceptual disabilities such as dyslexia, minimal brain dysfunction and developmental aphasia.

For further information or assistance, please contact:
Coordinator of the Office of Services for the Disabled, at 844-8211, ext. 260 or 261.

Tompkins Cortland Community College
Dryden, NY



Return to:

Office of Services for the Disabled
Tompkins Cortland Community College
170 North Street
Dryden, New York 13053

# Our services

The Office of Services for the Disabled is available to assist you to enter and successfully complete an occupational or technical program at Tompkins Cortland Community College.

We invite you to identify yourself by completing the attached form and return it to us. Such self-identification is voluntary and will be maintained on a confidential basis. This information, voluntarily given or inadvertently received, will not adversely affect any admission decision. It will, however, help us in developing appropriate support services to facilitate your learning.

Our office maintains personal contact with and information about sponsoring agencies and social and recreational organizations that may be of benefit to you. Some of the services provided by this office not only for students but also faculty and staff include:

## Academic

- COUNSELING AND ADVISEMENT are available for any of your personal, vocational, educational or career concerns.
- STUDENT AIDES will help as readers, tapers, note takers, attendants, interpreters and proctors.
- TUTORS are available for academic subjects, study and/or testing skills.
- TESTING adjustments or alternative methods of testing can be arranged on an individual basis.
- FINANCIAL INFORMATION will be furnished to help in identifying and contacting sources of financial aid.



## Faculty Resource

- Provide faculty and staff with specific information on the types of disabilities and what to expect in the classroom.
- Provide curriculum development services in redesigning courses to provide program accessibility.
- Provide in-service awareness training programs.
- Other services deemed necessary

## Accommodation

- ELEVATOR KEYS can be obtained by students with mobility limitations.
- MEDICAL PARKING Permits will be granted by the Security Office.
- REGISTRATION PROCEDURES can be adapted on an individual basis.
- ORIENTATION will be conducted by student aides. Braille and large print maps of the College are available.

## Auxilairy

- ELECTRONIC EQUIPMENT is supplied on a short-term loan, including Perkins Brailler, cassette tape recorders, lighted magnifiers, and a Talking Book Machine Record Player.
- TAPING SERVICE will prepare recordings of periodicals and texts not yet on tape.
- CURRENT CATALOGS are maintained of large print books and recordings, and materials and audio tapes of commonly used texts.

## OVR Counselor

This office will be the on-campus contact for students sponsored by the Office of Vocational Rehabilitation.

VOLUNTARY SELF-IDENTIFICATION FORM

Name _____ Phone _____

Address _____

Nature of Disability _____

# INFORMATION RESOURCES

*A major irony is that sufficient information probably exists to satisfy the needs of any particular disabled student. However, it is the search for and assembly of such pertinent information that is both difficult and disorganized at present.*

*— William Roth, Associate Professor, State University of New York at Albany*

## ORGANIZATIONS AND ASSOCIATIONS

• ACCENT ON INFORMATION
P.O. Box 700
Bloomington, IL 61701

• ALEXANDER GRAHAM BELL ASSOCIATION FOR THE DEAF
3417 Volta Place, N.W.
Washington, DC 20007
(202)337-5220 (Voice/TTY)

A publication and information center about deafness. Bell's philosopy of mainstreaming deaf children emphasizes oral-deaf education. Lip reading and use of residual hearing for oral communication differentiates this group from those espousing manual communication (sign language). Materials are designed for parents, teachers, and deaf-oral adults. Descriptive literature and publications list is available by request.

• AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS)
Project on the Handicapped in Science
Office of Opportunities in Science
1776 Massachusetts Avenue, N.W.
Washington, DC 20036
(202)467-4497
Dr. Martha Ross Redden, Project Director

AAAS is a major resource center promoting access to science for the handicapped. Publications include a free brochure, "Project on the Handicapped in Science," and two books: Resource Directory of Handicapped Scientists and Science for Handicapped Students in Higher Education: Barriers, Solutions, and Recommendations. The AAAS Chautauqua Short Course, "The Handicapped Student in Science" provides information to college science teachers who will have handicapped students in their classes.

• AMERICAN COALITION OF CITIZENS WITH DISABILITIES, INC.
1200 15th Street, NW
Suite 201
Washington, DC 20005
(202)785-4265 or (800)785-2835 (Both numbers are voice or TTY).

This coalition of disabled groups and individuals provides a variety of education and training services working to ensure accessible activities.

• AMERICAN COUNCIL OF THE BLIND
1211 Connecticut Avenue, NW
Suite 506
Washington, DC 20036
(202)833-1251

Organization composed primarily of blind persons. ACB provides many services to members and acts as a national clearinghouse on blindness. ACB publishes Braille Forum, provides research and advocacy on service delivery issues. Descriptive literature available by request.

• AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS
815 16th Street N.W.
Washington, DC 20006

The Human Resources Development Institute, a project of the AFL-CIO, has played a pioneering role in finding jobs for the disabled, and in developing employee acceptance of working with those who are handicapped.

• AMERICAN FOUNDATION FOR THE BLIND
15 West 16th Street
New York, NY 10011

The foundation serves as a clearinghouse on all pertinent information about blindness and services to the blind. It supplies a free catalogue as well as International Guide to Aids and Appliances for Blind and Visually Impaired Persons ($3.00). Some items include a talking thermometer, a talking digital multimeter, a talking micrometer, and a talking Vernier caliper.

• AMERICAN MEDICAL ASSOCIATION
Department of Environmental, Public, and Occupational Health
535 North Dearborn Street
Chicago, IL 60610

The AMA was founded in 1847 to promote the science and art of medicine and the betterment of public health. The principal programs and activities of the AMA's Department of Environmental, Public, and Occupational Health include advising physicians in industry, studying environmental problems, encouraging employment of the handicapped, and further implementing efforts of the AMA and other groups in disseminating knowledge to employers and to the general public concerning employment of the handicapped.

• AMERICAN PRINTING HOUSE FOR THE BLIND
P.O. Box 6085
Louisville, KY 40206
(502)895-2405

This national non-profit printing house provides information about new materials and educational aids, as well as the availability of textbooks in Braille, large type, records, and on cassette tape. They answer inquiries and make referrals to other information sources and service providers, and prepare bibliographies, abstracts, or indices in response to certain direct requests. Print catalogs of several types of items manufactured by APHB, including a Braille music catalog are available.

• AMERICAN SPEECH, LANGUAGE AND HEARING ASSOCIATION
10801 Rockville Pike
Rockville, MD 20852
(301)897-5700

• AMERICAN VOCATIONAL ASSOCIATION
2020 N. 14th Street
Arlington, VA 22201

A nonprofit organization, the AVA strives to expand and improve vocational education. The 55,000 member association holds workshops and conferences, publishes the American Vocational Journal nine times a year, and produces a yearbook. One section of AVA, entitled the National Association of Vocational Education Special Needs Personnel (NAVESNP), serves as a unifying association for all personnel interested in or responsible for learners with special vocational education needs.

• ASSOCIATION ON HANDICAPPED STUDENT SERVICES PROGRAMS IN POSTSECONDARY EDUCATION (AHSSPPE)
Handicapped Student Services
Office of Student Life
206 Student Services Building
Iowa State University
(515)294-1020
Jan Huss, President

- BRAILLE BOOK BANK
  National Braille Association, Inc.
  422 Clinton Avenue, South
  Rochester, NY 14620

  The Book Bank supplies college texts.

- BUREAU OF EDUCATION FOR THE HANDICAPPED
  U.S. Office of Education
  7th and D Streets, S.W.
  Washington, DC 20202

- CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION
  University of Wisconsin-Madison
  321 Education Building, Box 49
  Madison, Wisconsin 53706

- THE CLEARINGHOUSE ON THE HANDICAPPED
  Office of Information and Resources for the Handicapped (OHEW)
  Room 338D, Hubert Humphrey Building
  200 Independent Avenue, S.W.
  Washington, D.C. 20201

- COMMITTEE FOR THE HANDICAPPED
  People-to-People Program
  Suite 610, LaSalle Building
  Connecticut Avenue and L Street, N.W.
  Washington, D.C. 20036

- THE COUNCIL FOR EXCEPTIONAL CHILDREN
  1920 Association Drive
  Reston, VA 22091
  (800)336-3728

  The Council for Exceptional Children is a professional association whose purpose is to advance the education of all exceptional children, handicapped and gifted. Although CEC is a membership organization, many of its services are available to any person concerned with special education. CEC's major activities include information services, publications, training, and governmental relations. This organization's Division on Career Development publishes a biannual journal, Career Development for Exceptional Individuals. The journal includes articles, reports, and reviews on education and career development for exceptional children and adults. It is free to division members and $16 a year to nonmembers.

- EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

  ERIC is a national information system for education, with a network of 16 clearinghouses, each with a different educational focus. Of interest to vocational educators serving the handicapped are two clearinghouses:

  ERIC Clearinghouse in Career Education
  The Ohio State University
  1960 Kenny Road
  Columbus, OH 43210

  ERIC Clearinghouse of the Handicapped and Gifted
  1920 Association Drive
  Reston, VA 22091

- FEDERAL OFFICE FOR HANDICAPPED INDIVIDUALS
  Department of Health, Education, and Welfare
  Washington, DC 20201
  (202)245-6644

  A clearinghouse and advocacy unit for handicapped individuals. It will answer inquiries at no charge concerning whom to contact, where to find specific information, how to inquire about benefits, etc. In addition, the office is attempting to prepare long-range plans for delivery of services, research, and evaluation.

- FOUNDATION FOR SCIENCE AND THE HANDICAPPED (FSH)
  154 Juliet Court
  Clarendon Hills, IL 60514
  Dr. S. Phyllis Stearner, Treasurer

  FSH is an organization of handicapped scientists which functions as a resource and advocacy group promoting access to science education and employment for the handicapped. FSH publishes a newsletter.

- GALLAUDET COLLEGE PRESS
  Division of Public Services
  Kendall Green
  7th and Florida Avenue, NE
  Washington, DC 20002
  (202)651-5591 (Voice/TTY)

  Publications available include The Deaf Student in College, a two booklet portfolio which outlines how to meet the needs of deaf students in mainstreamed settings. It also describes over sixty deaf student programs currently available on campuses across the country (free). "Whole Kit and Caboodle" and "Teacher's Resource Kit" are among the many publications available from the Division of Public Services. The second kit is a system for sensitizing hearing teachers of deaf adults. Write for the publications list for the price of these kits and other resources.

- HEATH RESOURCE CENTER (HIGHER EDUCATION AND THE HANDICAPPED)
  One Dupont Circle
  Washington, DC 20036
  HEATH hotline number 202/293-6447

  This center was established by the American Association for Higher Education to help the postsecondary education community serve handicapped persons and integrate them into its ranks. The center responds to written and telephone inquiries on such topics as awareness activities, career development, student services, and technical concerns (physical modifications such as ramps, chair lifts, etc., and services for the deaf and blind, including TTY telephones and reading machines).

- HUMAN RESOURCES CENTER
  Willets Road
  Albertson, NY 11507

  This is a nonprofit organization for the education, training, and placement of the disabled, educably retarded, and aged. Its principal programs are the employment, evaluation, training, and placement of the handicapped; research and demonstration projects; and seminars and training institutes for business and professionals.

- JOB OPPORTUNITIES FOR THE BLIND (JOB)
  1800 Johnson Street
  Baltimore, MD 21230
  (301)659-9314 Toll-Free In-Wats 1-800-638-7518

- LIBRARY OF CONGRESS
  National Library Service for the Blind and Physically Handicapped
  Washington, DC 20542
  (202)287-5100

- MAINSTREAM, INC.
  1200 15th Street, N.W.
  Washington, DC 20005

  This is a nonprofit organization created to assist industry, labor, education, health institutions, and government grantees who are required to comply with affirmative action and reasonable accommodation provisions of the Rehabilitation Act of 1973. The service is supported largely by foundation grants and private donations. It offers consultation services to help develop affirmative action programs, sponsors conferences, issues a quarterly newsletter, offers a telephone hotline service, and operates a job referral service. It helps organizations identify the qualifications needed for a job and then assists applicants who have those qualifications, particularly those who are handicapped.

- NATIONAL ASSOCIATION FOR STUDENTS WITH HANDICAPS
  Rusty Miller, President
  1000 North Star 27
  Oklahoma State University at Stillwater
  Stillwater, OK 74074
  (405)624-9366

  NASH is a national organization of disabled students and disabled student organizations from universities and college campuses. NASH acts as a speaker for these groups, provides information on how to make a campus more accessible, and can assist in the formation of a local chapter. For more information, contact the President.

- NATIONAL ASSOCIATION OF VOCATIONAL EDUCATION FOR SPECIAL NEEDS PERSONNEL (NAVESNP)
  University of Nebraska-Lincoln
  300 West Nebraska Hall
  Lincoln, NE 65888

  This organization is affiliated with the American Vocational Association. It serves personnel interested in or responsible for the development or operation of programs for learners with special vocational education needs. Through its quarterly newsletter and annual conference (with AVA), it seeks to keep its members informed on current issues, concerns, ideas, programs, and materials related to learners with special needs.

- NATIONAL CENTER EDUCATIONAL MEDIA AND MATERIALS FOR THE HANDICAPPED (NCEMMH)
  Ohio State University
  Columbus, OH 43210

  This Center, formerly a project sponsored by the Bureau of Education for the Handicapped, continues under the auspices and support of the Ohio State University, College of Education. NCEMMH assists special educators and parents with information resource products and services offered through the use of a database containing over 36,000 abstracts on materials useful in educating exceptional children.

- NATIONAL CENTER FOR LAW AND THE HANDICAPPED
  P.O. Box 477
  University of Notre Dame
  Notre Dame, IN 46556
  (219)283-4536

  Provides legal backup services for people and organizations involved in litigation regarding the civil rights of handicapped persons.

- NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION
  Ohio State Univeristy
  1960 Kenny Road
  Columbus, OH 43210

  The main function of this center is to increase the ability of agencies and organizations to solve educational problems related to career planning, preparation, and progress through the generation of knowledge by means of primary research in career problems; development of educational programs and products that include teacher's guides, staff development modules, and community involvement materials; the operation of a variety of information services; and conducting leadership development and training programs. The center disseminates a variety of materials such as lists of resource organizations in selected areas, lists of new publications and continuing research and devleopment projects conducted since 1970, and a bibliography listing more than 700 publications available for purchase, including titles on vocational education and the handicapped.

- THE NATIONAL INFORMATION CENTER FOR THE HANDICAPPED
  1201 Sixteenth Street, N.W.
  Suite 607E
  Washington, D.C. 20036

- NATIONAL INSTRUCTIONAL MATERIALS INFORMATIONAL SYSTEM [NIMIS II--(NIMIS/NICSEM)] National Information Center for Special Education Materials
  University of Southern California
  University Park
  Los Angeles, CA 90007

  Catalog based on NICEM media base and two newsletters--Frankly-Speaking and The Program Tree--available by request.

- NATIONAL PUBLIC LAW TRAINING CENTER
  2000 P Street, N.W.
  Suite 600
  Washington, D.C. 20036
  (202)872-0660

  NPLTC conducts training programs in a number of areas, including advocacy for/with the Mentally Ill and Handicapped. They have developed a comprehensive training manual ($75.00 plus postage). Contact Rosalyn Voige.

- NATIONAL RIGISTRY OF INTERPRETERS FOR THE DEAF
  814 Thayer Avenue
  Silver Spring, MD 20910
  (301)588-2406

  The Registry issues 10 Regional Directories of certified interpreters. Each Directory - corresponding to each Federal Region - is available for a minimal fee. The directories provide information about certification, costs, availability, training, and other useful materials.

- NATIONAL REHABILITATION INFORMATION CENTER
  308 Mullen Library
  The Catholic University of America
  Washington, D.C. 20064
  (202)635-5826

  This center supplies copies of research reports and audio-visual materials, journal articles, conference proceedings and other publications. Audio-visual materials are available on loan or for the cost of reproduction.

• NATIONAL TECHNICAL INSTITUTE FOR THE DEAF AT ROCHESTER INSTITUTE OF TECHNOLOGY
One Lomb Memorial Drive
Rochester, NY 14623
(716)475-6748 (Voice/TTY)

Project Outreach serves as a resource to other educational institutions involved in mainstreaming deaf people into regular classes. NTID conducts training programs for interpreters, notetakers, and tutors and can advise other colleges on setting up similar programs. Descriptive material available by written request.

• OFFICE FOR HANDICAPPED INDIVIDUALS
Department of Education
Washington, D.C. 20202

This federal agency advises the Secretary of Education on matters related to handicapped persons. It serves as an advocate for the handicapped in the department. It coordinates appropriate agency programs and services, acts as a liaison between the department and organizations representing the handicapped, and provides public information for the handicapped individuals. Its major publications are Programs for the Handicapped (bimonthly) and Federal Assistance Guide to Programs for the Handicapped.

• PARALYZED VETERANS OF AMERICA (PVA)
4350 East West Highway
Suite 900
Bethesda, MD 20814
(301)652-2135

• PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED
1111 20th Street N.W.
Washington D.C. 20210
(202)653-5044

This committee comprises 600 leading organizations and individuals involved in the rehabilitation and employment of handicapped people. It works to build a climate of acceptance for handicapped people throughout the United States, and brings agencies and organizations together to deal with problems impeding full opportunity for handicapped people, including such problems as architectural barriers, transportation barriers, civil rights, and preemployment medical exams.

• RECORDINGS FOR THE BLIND, INC.
215 E. 58th Street
New York, NY 10022
(800)221-4792

Taped educational books for blind and physically handicapped students are available free. Currently RFB has over 42,000 titles steadily augmented by the input of over 4,800 trained volunteers in 29 centers around the country. Application forms and descriptive literature are available by request. This organization will also transcribe textbooks onto tape (from K to postsecondary levels) and selected diagrams and graphics into raised-line drawings. This service is free and the materials are on loan.

• SCIENCE FOR THE HANDICAPPED ASSOCIATION (SHA)
University of Wisconsin, Eau Claire
SSS 201
Eau Claire, WI 54701

SHA promotes science for all handicapped children. The Association publishes a newsletter containing bibliographic citations on science for the handicapped as well as descriptions of current research, conferences, and courses. Upon payment of dues, SHA will supply a bibliography if requested.

• WISCONSIN VOCATIONAL STUDIES CENTER
321 Education Building
Box 49
University of Wisconsin-Madison
Madison WI 53706

This research, development, and service center focuses on the delivery of services including analysis of need, target groups served, institutional organization, instructional and curriculum methodology and content, labor market needs, manpower policy, and other appropriate factors. Of special note is the Center's A Bibliography of Materials for Handicapped and Special Education.

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## PERIODICALS, NEWSLETTERS

- ACCESS AMERICA
  Architectural & Transportation Barriers, Compliance Board
  Washington, D.C. 20201

- ALERT
  A Communication of: AHSSPE - Association of Handicapped Student Services Programs in Postsecondary Education
  Richard W. Harris (Editor)
  Ball State University
  Student Center B-1
  Muncie, Indiana 47306

- AMICUS
  National Center for Law & The Handicapped, Inc.
  211 West Washington Street
  Suite 1900
  South Bend, Indiana 46601

- BULLETINS ON SCIENCE AND TECHNOLOGY FOR THE HANDICAPPED
  American Association for the Advancement of Science
  Office of Opportunities in Science
  1515 Massachusetts Avenue, N.W.
  Washington, D.C. 20005

- COMMUNICATION OUTLOOK FOCUSING ON COMMUNICATION AIDS AND TECHNIQUES
  Communication Outlook Artificial Language Laboratory, Computer Science Department
  Michigan State University
  East Lansing, Michigan 48824

- DISABLED-U.S.A.
  President's Committee on Employment of the Handicapped
  Washington, D.C. 20210

- EASTER SEAL COMMUNICATOR
  National Easter Seal Society for Crippled Children and Adults
  2023 W. Ogden Avenue
  Chicago, Illinois 60612

- EDUCATION ON THE HANDICAPPED
  Capital Publications, Inc.
  2430 Pennsylvania Avenue, N.W.
  Washington, D.C. 20037

- EDUCATION OF THE VISUALLY HANDICAPPED
  Publications Office
  919 Walnut Street
  4th Floor
  Philadelphia, Pennsylvania 19107

- HANDICAPPED AMERICANS REPORT
  2626 Pennsylvania Avenue, N.W.
  Washington, D.C. 20037

- HIGHER EDUCATION AND THE HANDICAPPED
  AAHE, American Association for Higher Education
  1 Dupont Circle
  Suite 780
  Washington, D.C. 20036

- HLMDC NEWSLETTER
  Handicapped Learner Materials Distribution Center
  Indiana University
  Audio-Visual Center
  Bloomington, Indiana 47405

- HOMEBOUND NEWS
  Queensborough Community College
  The City University of New York
  Bayside, New York 11304

- THE INDEPENDENT OBSERVER
  The Independents
  P.O. Box E 121, Squire Hall
  State University of New York at Buffalo
  Buffalo, New York 14214

- INDUSTRY - LABOR COUNCIL NEWSLETTER
  National Center on Employment of the Handicapped
  Human Resources Center
  Albertson, New York 11507

- JOURNAL OF CAREER EDUCATION: FOCUS ON VOCATIONAL EDUCATION
  Department of Practical Arts and Vocational Technical Education
  University of Missouri
  Columbia, Missouri 65201

- LANGUAGE, SPEECH AND HEARING SERVICES IN SCHOOLS
  American Speech and Hearing Association
  9030 Old Georgetown Road
  Washington, D.C. 20014

- MAINSTREAM
  Mainstream, Inc.
  1200 15th Street, N.W.
  Washington, D.C. 20005

- THE NYS ADVOCATE NEWSLETTER OF THE STATE ADVOCATE FOR THE DISABLED
  Room 3712
  The World Trade Center
  New York, New York 10047

- PROGRAMS FOR THE HANDICAPPED
  Office for Handicapped Individuals
  338D Hubert H. Humphrey Building
  200 Independence Avenue, S.W.
  Washington, D.C. 20201

- RECORDINGS FOR THE BLIND NEWS
  Newsletter from Recording for the Blind, Inc.
  45 East 58th Street
  New York, New York 10022

- SENSORY AIDS REPORT
  Wormald Sensory Aids Corporation
  Suite 110
  White Plains Office Centre
  205 West Grant Avenue
  Bensenville, Illinois 60106

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- ACCESS
  Feinstein, Peter; 1978. 16mm. film color/sound; 23 minutes. Sale: $325.00, rental: $30.00. Available from: Polymorph Films, 331 Newbury Street, Boston, Massachusetts 02115.
  A first prize winner at the International Rehabilitation Film Festival, the film has been made to prepare both the able-bodied and the disabled to accept their increased responsibility as well as the increased opportunities for the disabled.

- ACCESS AMERICA
  Architechtural and Transportation Barriers Compliance Board; 14 minute film. Available on free loan from: National Audiovisual Center (NAC), General Services Administration, Washington, D.C. 20409. Shows design accessibility for all people in the areas of business, government, historic preservation, education, transportation and recreation.

- ALL THINGS ON WHEELS AREN'T EQUAL
  Color film. Available on loan from: Director of Programs for Higher Education of the Disabled, Hofstra University, Hempstead, Long Island, New York 11550.
  Concentrates on barriers on college campuses.

- BEATING THE AVERAGES
  Color film, 30 minutes. Available on free loan from: National Audiovisual Center (NAC), General Services Administration, Washington, D.C. 20409.
  Narrated by Raymond Burr, depicts barriers for persons in wheelchairs.

- BETTER THAN I THOUGHT
  Eight filmstrips/cassettes, average length: 17 minutes, 160 frames. Each film/cassette $25.00, complete set $200.00. Available from: Wisconsin Vocational Studies Center, University of Wisconsin/Madison, 964 Educational Sciences Building, 1025 West Johnson Street, Madison, Wisconsin 53706. Phone: 608/263-3696.

  Designed to prepare vocational teachers to meet the needs of handicapped students. The series describes handicapped conditions, and the degree and kinds of modifications required to adapt vocational education to handicapped students. Each filmstrip is based on the philosophy and modification techniques developed and tested by Dr. Lloyd Tindall and John Gurerty of the Wisconsin Vocational Studies Center.
  Titles: "RX for Independence (Program Modification;" "TXKX tx thx Xpxn Rxxd (Learning Disabled); "Disturbed? Who's Disturbed? (Emotionally Disturbed);" "Unaccustomed As I Am (Educable Mentally Retarded);" "Feel Not Good (Hearing Impaired);" "Placement By Disability (Visually Impaired);" "Willing to Try (Physically Disabled);" "Square Peg, Round Hole (Failing Students)."

- CHANGES
  Color film, 29 minutes, rental fee $35.00, sale $335.00. Available from: Stanfield House, 12381 Wilshire Blvd., Suite 203, Los Angeles, CA 90025.
  Produced by the UCLA Handicapped Students Union, show students discussing their triumphs and frustrations.

- CRIP TRIPS
  Black & White film, 16 minutes. Rental fee $20.00, sale $150.00. Available from: Canyon Cinema Co-op, 2325 3rd Street, Suite 338, San Francisco, CA 94107.
  Heightens awareness of disabled people to their own potential.

- A DAY IN THE LIFE OF BONNIE CONSOLO
  Color film. 17 minutes. For educational institutions, rental $27.50, sale $275.00. Available from: Barr Films, P.O. Box 5667, Pasadena, CA 91107.
  Shows a day in the life of a woman who functions fully as a mother and homemaker though she was born without arms.

- DELLA
  Black & White Film, 12 minutes. Available from: A/V Publication Department, Kenny Rehabilitation Institute, 1800 Chicago Avenue, Minneapolis, NM 55404.
  Focuses on the rehabilitation of a young deaf paraplegic, who now is an active member of her community.

- A DIFFERENT APPROACH
  Color film, 21 minutes. Available for rental from: Film Scheduling, Modern Talking Pictures Service, Inc., 2323 New Hyde Park Road, New Hyde Park, New York 11042; free one-day loan, title no. 11360. Purchase from: South Bay Mayor's Committee for Employment of the Handicapped, 2409 North Sepulveda, Suite 202, Manhattan Beach, CA 90266; $225.00 plus $2.00 handling for film, $215.00 plus $2.00 for 3/4" video cassette.
  A humorous approach to attitudes about employment of disabled people. This film is designed to encourage employers to hire the handicapped. Nominated for an Academy Award.

- EMPLOYABILITY SKILLS PROGRAM
  A 15-module set for postsecondary students with cassettes, filmstrips, Instructor's Guide, script, and exercises for job letters, resumes, and interest inventories. Purchase price $300.00. Demonstration kit containing samples of several modules on a filmstrip with tape available on a 15-day trial basis. Available from: University of Wisconsin-Madison, Roger H. Lambert, Associate Director, 321 Education Building, (Box 49), Madison, Wisconsin 53706.

- THE GOOD LIFE
  16 mm. sound film, 4 minutes, 1973. Available from: Data Films, 2625 Temple Street, Hollywood, CA 90026.
  Prepared by Los Angeles Community College, California, this film presents four 60-second television commercials designed to recruit handicapped and disadvantaged students for community college programs.

- GOVERNMENT SUPERVISOR TRAINING
  5 tape-slide shows involving six hours of multiple learning techniques. Available on free loan from: Texas Rehabilitation Commission, Employment Resources Section, 118 East Riverside Drive, Austin, Texas 78704.
  This program on utilizing handicaped employees was prepared by the Texas Rehabilitation Commission. It presents facts about the handicapped, job analysis and selective placement, work station modification and Texas Rehabilitation Commission Services. Designed for groups of 12 to 32, but useful in different settings. May be reproduced if appropriate credit is given.

- HANDICAPISM: A SLIDE SHOW
  Package of 140 slides, a script, and a poster; sale: $55.00 plus $2.00 postage. Available from: Human Policy Press, P.O. Box 127, Syracuse, NY 13210.
  Intended for adults, this program attempts to change attitudes towards handicapped individuals.

- I AM NOT WHAT YOU SEE
  16 millimeter sound color film, 28 minutes; 1975. Sale: $375.00, rental: $40.00. Available from: Filmmakers Library, Inc., 290 West End Avenue, New York, NY 10023.
  Prepared by the Canadian Broadcasting Corporation, Toronto, Ontario, this film features Sondra Diamond, a cerebral palsy victim, who is unable to perform such routine tasks as dressing or bathing, yet pursued an education and has a career as a psychologist. Gives insight into the psycology of the handicapped.

- MIMI
  Black & white film, 12 minutes. Rental: $15.00, sale: $150.00. Available from: Billy Budd Films, 235 East 57th Street, New York, NY 10022.
  An independent young woman, disabled since birth, combines marriage and artistic interests.

- SPECIAL PEOPLE
  3 color filmstrips and cassettes and an overview sheet, 1978. Sale: $22.00 per sound filmstrip. Available from: Educational Supplements, 401 Westport Avenue, Norwalk, Connecticut 06851 (#846-0269).
  This program by Nona Tusman, Ph.D. and Michael Harder depicts three exceptional adults who are functioning successfully in society.

- A STATEWIDE ASSESSMENT RELATED TO HANDICAPPED STUDENTS: A SURVEY OF VOCATIONAL INSTRUCTORS IN MARYLAND
  59 color slides with cassette tape; 9 minutes; 1980. Available on free loan from: Maryland State Department of Education, Research and Development, 200 West Baltimore Street, Baltimore, MD 21201 Phone: 301/659-2088.
  A slide/tape program summarizing the results of a statewide survey of vocational instructors and administrators in Maryland. Depicts disabled students in a variety of classroom, lab, and shop settings. Presents educators' reactions to mainstreaming and problems they've encountered in teaching handicapped students in regular classes.

- THE SUREST TEST
  Film. Available on loan from: Easter Seal Society for Crippled Children and Adults of Washington, 521 2nd Avenue West, Seattle, Washington 98119.
  A film about barrier-free design.

- TAKING ON TOMORROW
  30-minute film with guide. Available from: National Audiovisual Center (General Services Administration), Attn: Order Section, Washington, D.C. 20409; phone: (301)763-1891; (film #A02631).
  Directed toward policymakers in postsecondary institutions, it shows some approaches used by one institution to develop programs and services to meet vocational needs. Especially useful in conference settings.

- VOCATIONAL TRANSPARENCIES
  Set of 35 transparencies. Available from: Mafex Learning Center, 90 Cherry Street, Johnstown, Pennsylvania 15902.
  Provides a teaching unit designed to help prepare students for the variety of forms they will have to contend with when they enter the world of work. Included among the forms are job applications, employment application letters and a social security number application.

- WHATEVER IT TAKES
  3 filmstrips/cassettes, average length: 15 minutes, 140 frames; sale: $75.00. Available from: Wisconsin Vocational Studies Center, University of Wisconsin/Madison, 964 Educational Sciences Building, 1025 West Johnson Street, Madison, Wisconsin 53706. Developed by Dr. Lloyd Tindall & John Gugerty of the Vocational Studies Center, this series explores the concepts of vocational program modification through the experiences of Ben Collins, automotive instructor. Focuses on modification of instruction, materials, testing procedures, services, goals and curriculum. Complete set includes 3 filmstrips/cassettes, User's Guide, annotated bibliography, & handbook; $110.00.

## MEDIA DISTRIBUTION CENTERS

- CAPTIONED FILMS FOR THE DEAF DISTRIBUTION CENTER
  814 Thayer Avenue
  Silver Spring, MD 20910
  Phone: (301) 587-5940 (voice and TTY)

- FILMS AND OTHER A-V INFORMATION
  Center For Studies in Vocational and Technical Education
  University of Winconsin-Madison
  Madison, Wisconsin 53706

- FILMS ON HANDICAPS
  Educational Film Library Association
  43 West 61st Street
  New York, NY 10023

- HANDICAPPED LEARNER MATERIALS DISTRIBUTION CENTER
  Indiana University
  Audio-Visual Center
  Bloomington, Indiana 47401

- NATIONAL CENTER ON EDUCATIONAL MEDIA AND MATERIALS FOR THE HANDICAPPED
  Ohio State University
  2540 Olentangy River Road - Building B, 5th floor
  Columbus, Ohio 43210
  Phone: (614) 422-7596
  Note: This center provides leadership and service in the research and development, design, and dissemination of learning resources that are effective for the handicapped. It publishes the NCEMMH Catalog: Media, Materials, and Publications, and Apropos, a quarterly newsletter.

- PROFESSIONAL FILMS AVAILABLE FOR LOAN FROM THE NEW YORK STATE SEIMC/ALRC NETWORK
  New York State Education Department
  Bureau of Program Development
  Hawk and Elk Street, Room 243
  Albany, NY 12234
  Phone: (518) 474-7337

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## LIBRARY RESOURCES FOR THE BLIND & PHYSICALLY HANDICAPPED

### National Library Services

A free national library service providing recorded and braille materials to blind and physically handicapped persons is administered by the National Library Service for the Blind and Physically Handicapped, Library of Congress (NLS). With the cooperation of authors and publishers who grant permission to use copyrighted works, NLS selects and produces full-length books and magazines in braille and on recorded disc and cassette. The reading materials produced are then distributed to a cooperating network of regional and subregional libraries that circulate them to eligible borrowers by postage-free mail. Network libraries also offer reference, readers' advisory, and other services.

Established by an act of Congress in 1931 to serve blind adults, this program was expanded in 1952 to include children, and again in 1966 by Public Law 89-522 to include individuals with physical impairments that prevent the reading of standard print. Fifty-six regional and 104 subregional libraries are currently part of the network, serving all parts of the United States, Puerto Rico, and the Virgin Islands.

Who is Eligible? Residents who are legally blind or who cannot read ordinary print with the aid of corrective glasses because of a visual handicap, or who cannot use the standard book format because of a physical handicap, or who cannot read print material in a normal manner because of severity of organic disfunction...are eligible when properly certified. Institutions may be registered for service to eligible patients, students, clients, or residents.

* * *

NATIONAL LIBRARY SERVICE

Division for the Blind and Physically Handicapped
Library of Congress
1291 Taylor Street NW
Washington, D.C. 20542

NEW YORK - REGIONAL LIBRARY
(*New York City and Long Island*)

Library for the Blind and Physically Handicapped
The New York Public Library
166 Avenue of the Americas
New York, NY 10013
(212) 925-1011
Librarian: Ms. Barbara Nugent

Hours: 9:00-5:00, M-F

Book Collection: Disc, cassette, braille

Special Services: Patron newsletter

NEW YORK - REGIONAL LIBRARY
(*Except New York City and Long Island*)

New York State Library for the Blind and Visually Handicapped
Cultural Education Center
Empire State Plaza
Albany, NY 12230
(518) 474-5935
Librarian: Ms. Audrey J. Smith

Hours: 8:30-5:00, M-F

Book Collection: Disc, cassette, braille

Special Collections: Reference materials on blindness and other handicaps

Special Services: Reading aids; Kurzweil Reading Machine, Patron newsletter

Source: Library Resources for the Blind and Physically Handicapped: A Directory of NLS Network Libraries and Machine-Lending Agencies 1980. Washington, D.C.: Library of Congress, 1980. Available from: Library of Congress, National Library Service for the Blind and Physically Handicapped, Washington, D.C. 20542. (No cahrge)

This directory is arranged alphabetically by state and lists network libraries that loan materials and provide special services.

## FUNDING SOURCES

- Federal Assistance for Programs Serving the Handicapped (fourth edition).
This 366 page book lists programs of grants and loans available to state and local government agencies, nonprofit organizations, and individuals. For a free copy, send a mailing label to the following address. Ask for a publication list.
Available from: Office of Special Educaiton and Rehabilitative Services, Office of Information and Resources for the Handicapeed, Clearinghouse for the Handicapped, Department of Education, 330 C Street, SW, Washington, DC 20202, (202) 245-0080

- A Guide to Organizations, Agencies, and Federal Programs for Handicapped Americans (1979).
Available for $15 prepaid ($10 to subscribers of Handicapped Americans Reports.) This 72-page report is a reference tool for groups with programs related to handicapped concerns, and includes a section on foundations which offer disability related grants.
Available from: Capitol Publications, 2430 Pennsylvania Avenue, NW, Washington, DC 20037, (202) 452-1600

- 1980-1981 Handicapped Funding Directory

A paperback publication which lists over 400 foundations, associations, and government associations and government agencies for programs and services. The Directory includes articles on how to obtain a grant, what a reviewer looks for in an application, how to research a foundation, and other vital material. The Directory is available for $16.50 prepaid.
Available from: Research Grant Guides, PO Box 357, Oceanside, NY 11572

* * *

- Fund for theImprovement of Postsecondary Education, Office of the Assistant Secretary for Educational Research and Improvement, Room 3123, FOB-6, 400 Maryland Avenue, SW, Washington, DC 20202, (202) 245-8901.

  Has supported many model projects improving access to and quality of postsecondary education for handicapped students, in one-, two-, and three-year grants. For more information, contact Ms. Diana Hayman at the above number.

- Office of Special Education, Joseph Rosenstein, Coordinator, RegionalEducation Programs for Deaf and Other Handicapped Persons, Rm. 3121, Donahoe Building, 400 Maryland Avenue, SW, Washington, DC 20202; (202)245-9722 (Voice) or 245-9598 (TTY).

  Makes Federal awards to exemplary demonstration projects of support services to handicapped students in postsecondary education. Request to be put on mailing list for grant application packets for FY 83.

* * *

Since there is very little federal money for making postsecondary programs accessible, ingenuity and creativity of the planners is what can make an impact on achieving a successful program. Investigate state funding from such places as the Governor's Committee on the Handicapped, and State Vocational Rehabilitation Agency, especially Inservice Training, and Innovation and Expansion Grants. Become involved in your institutional annual budgetary process.

Aids and resources need not be restricted to grants of money. Often local agencies can help you set up workshops, prepare brochures, do a needs assessment, or even provide materials, space, or equipment. Local Chambers of Commerce, Mayor's Offices, associations of handicapped consumers are some possibilities.

Programs to investigate at the local level include you Community College Board, Disadvantaged Students Program (TRIO), College Work-Study Program, and Manpower programs. Do not overlook the National Alliance of Businessmen which has local chapters.

Another resource is the private voluntary agency sector which may be able to provide services if not money. Some organizations are Easter Seal Society, MS Foundation, Paralyzed Veterans of America, National Paraplegia Association, and others. Your local United Way or United Fund organization can help you locate these agencies.

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*FINANCIAL RESOURCES FOR DISABLED INDIVIDUALS. Falls Church, Virginia, Institute for Information Studies, 1980.*
*Available from: National Rehabilitation Information Center, 8th and Varnum Streets, N.E., The Catholic University of America, Washington, D.C. 20064.*
*This comprehensive guide provides an excellent overview of financial resources for the disabled in this nation. It is a practical, up-to-date source of information and covers a broad range of programs which focus on basic living needs, education, and employment of the disabled.*

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Source: Anderson, W.R. and Hartman, R. Higher Education and the Handicapped (HEATH) 1981 Resource Directory; pp. 9-10.
Available from: HEATH Resource Center, American Council on Education, One Dupont Circle, Washington, D.C. 30026.

## SELECTED BIBLIOGRAPHIES

- ERIC UPDATE on Vocational Education for the Handicapped, 1982. The ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, Ohio State University, 1982.
  This bibliography is the result of a comprehensive computer search of the ERIC database. All entries in the bibliography are annotated and include the ERIC descriptors.
  Available from: The National Center for Research in Vocational Education, National Center Publications, Box F, 1960 Kenny Road, Columbus, Ohio 43210.

- Job Placement and Adjustment of the Handicapped: An Annotated Bibliography. Compiled by Carol P. Knowle, Information Series No. 146. National Center for Research in Vocational Education, The Ohio State University, 1979.
  This bibliography was compiled from two computer-assisted searches of the ERIC database and includes listings of both journal articles and education documents. It was produced to assist special educators and vocational educators in obtaining information on the job placement and career adjustment of various handicapped populations.
  Available from: National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

- Looking for Ways to Serve Disabled Students More Effectively? A Selected Annotated Bibliography. Compiled by Susan Sorrells and Maxine Krulwich; a Project funded by the U.S. Department of Education, 1981.
  Presents a variety of recommended basic resource materials including books, directories, guides, reports, and handbooks on all aspects of serving disabled college students including access, accommodations, career counseling, job placement, etc. Full bibliographic and ordering information is provided for each source.
  Available from: HEATH/Closer Look Resource Center, P.O. Box 1492, Washington, D.C. 20013 (202/833-4707).

- Occupational Education for Students with Special Needs: A Selective Bibliography. Prepared jointly by the Division of Occupational Education Instruction, The Bureau of Trade and Technical Education and the Office for Education of Children with Handicapping Conditions, Bureau of Program Devleopment and Special School Supervision, New York State Education Department, 1977.
  This bibliography provides a guide to some writings and research as they relate to vocational education for the handicapped. Material is divided into five main categories: Administration, Mainstreaming, Instruction, IEP, and Attitudes. All materials listed may be obtained through either:
  - Educational Programs and Studies Information Services (EPSIS), New York State Education Department
  - Educational Resources Information Center (ERIC) system - Collegiate Centers

  Available from: The University of the State of New York, The State Education Department, Office for Occupational and Continuing Education, Albany, New York 12230.

- Occupational Education for the Handicapped: A Bibliography. Prepared by the Bureau of Occupational Education Research, New York State Education Department, 1980.
  This bibliography is divided into four sections: agencies providing services to the handicapped, films, journal articles, and literary volumes. The materials listed address all aspects of occupational education for the disabled student.
  Available from: The University of the State of New York, State Education Department, Bureau of Occupational Education Research, Albany, New York 12234.

- Resources for the Vocational Preparation of Disabled Youth, 1980. President's Committee on the Handicapped, Washington, D.C., 1980.
  This document is an annotated bibliography of materials on special education, vocational education, and vocational rehabilitation services to handicapped youth at the secondary and postsecondary levels. It is the result of two meetings called "National Forum on Pathways to Employment" sponsored by the President's Committee on Employment of the Handicapped.
  Available from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 040-000-00418-1.

- Resources for Working with the Handicapped: An Annotated Bibliography. Compiled by Susan W. Miller of the Los Angeles Community College District, California, 1980.
  Resources are listed for community college vocational educators working with handicapped students. Resources are listed under the following topics and bibliographic forms: (1) assessment of the vocational educational needs of the handicapped, (2) model programs and projects, (3) instructional and resource materials for those providing educational services to the handicapped, (4) employment opportunities for the handicapped, (5) journal articles, (6) newsletters, (7) audio-visual materials, (8) guides and handbooks for handicapped students, (9) miscellaneous information, including directories and government publications, and (10) federal, state, and private agencies. Each entry includes availability and cost information.
  Available from: ERIC ED 183-229.

- Teaching Handicapped Students: Selected Resources for Vocational Teachers and Teacher Educators (1977); Maryland State Department of Education, Division of Vocational-Technical Education.
  This comprehensive bibliography provides information relating to the development and implementation of instructional programs for handicapped students. In order to facilitate the use of the bibliography, the material was divided into the following categories: (1) Books Relating to the Teaching of Handicapped Students; (2) Publications from Agencies and Organizations Serving Handicapped Students; (3) Agencies and Organizations Serving Handicapped Students; and (4) Relevant Abstracts, Indexes & Journals.
  Available from: Western Maryland Vocational Resource Center, P.O. Box 5448, McMullen Highway, Cresaptown, Maryland 21502.

# THE COUNCIL FOR EXCEPTIONAL CHILDREN

A Spot Bibliography
On Prominent Disabled Persons

The following books portray the lives of people who overcame various types of disabilities:

Bernstein, Burton. Thurber: A Biography. Dodd, 1975.
A cartoonist and author who lost one eye in a childhood accident and the sight of his other one in adulthood.

Bowe, Frank and Martin L. Sternberg. I'm Deaf Too: Twelve Deaf Americans. National Association of the Deaf, 1973.

Brown, Larry and William Gildea. I'll Always Get Up. Simon and Schuster, 1973.
A pro football player with a hearing impairment.

Bleir, Rocky and Terry O'Neil. Fighting Back. Stein and Day, 1975.
A disabled war veteran who succeeds in pro football.

Blinn, William. Brian's Song. Bantam, 1972.
The story of an athlete with leukemia.

Brickhill, Paul. Reach for the Sky: The Story of Douglas Bader, Legless Ace of the Battle of Britain. Norton, 1954.
An account of a disabled military hero.

Brown, Christy. Down All the Days. Stein and Day, 1970.
A writer with severe cerebral palsy who communicates by typing with the toes of his left foot.

Campanella, Roy. It's Good to be Alive. Little Brown, 1959.
An all star catcher for the Dodgers becomes disabled in an auto accident.

Edwards, Anne. Vivien Leigh: A Biography. Simon and Schuster, 1977.
An academy award winning actress who encountered periods of emotional disturbance in her adult life.

Eareckson, Joni and Joe Musser. Joni. Zondervan, 1976.
A severely disabled artist.

Farrell, Barry. Pat and Roald. Random House, 1969.
An actress (Patricia Neal) who returns to her career after a stroke leaves her temporarily paralyzed and aphasic.

Keller, Helen. The Story of My Life. Doubleday, 1954.
The deaf-blind author, stateswoman, and world figure.

Krents, Harold. To Race the Wind. Putnam, 1972.
A young blind man who recounts his marriage and law career. Basis for the play and motion picture "Butterflies Are Free."

Share, Dory. Sunrise at Campobello. Random House, 1958.
FDR's bout with polio which left him a paraplegic.

Tarnow, Gerda. Sarah Bernhardt: The Art Within the Legend. Princeton University Press, 1972.
The actress who continued her stage career despite having her leg amputated.

Valens, E. G. Other Side of the Mountain. Warner Books, 1975.
The life of Jill Kinmont, an Olympic skier paralyzed in an accident.

Tributes to Courage. Accounts of 13 people who have overcome disabilities. Forward by violinist Itzhak Perlman. 1980. Available from: Courage Center, 3915 Golden Valley Road, Golden Valley, Minnesota 55422.

Biographical Sagas of Will Power by Harry J. Baker, 1970, 320 pp.
Biographical sketches of 54 famous people who overcame handicaps and other disadvantages.
Available from: Vantage Press, Inc., 516 West 34th Street, New York, NY 10001

# AHSSPPE

The Association on Handicapped Student Services Programs in Post-Secondary Education, (AHSSPPE), is a national organization of over 500 persons from all fifty states, Canada, and Puerto Rico committed to promoting the full participation of individuals with disabilities in college life. AHSSPPE, formally established on March 4, 1978, has grown from a group of concerned program directors who first met for a conference in October, 1978, to an association of over 200 institutions around the country. Our meetings and information sharing have focused on common problems and solutions in upgrading the quality of services available to handicapped students within post-secondary institutions.

## GOALS

The Association has been established to provide a vehicle which will strengthen the professionalism, expertise, and competency of individuals who are vitally interested and involved in services for handicapped students by:

- Encouraging the development and expansion of a communications network for those persons professionally involved in programs for handicapped students
- Developing the capability to make timely and meaningful responses to issues and concerns affecting the educational resources and environment of handicapped students
- Serving as a mechanism to facilitate the collection and dissemination of information on post-secondary education and the handicapped student
- Exploring areas of qualifications of persons working with handicapped students on post-secondary campuses

In addition, the Association is committed to promoting equal rights and opportunities for handicapped post-secondary students and graduates by encouraging and supporting legislation for their benefit.

## SERVICES

### Annual Conference

An annual meeting is held in a different part of the country each July. (Chicago, 1979; Denver, 1980; Boston, 1981; Columbus, Ohio, 1982; Oakland, California, 1983). This annual meeting brings together service providers and students from throughout the United States and Canada to share ideas which enhance opportunities for disabled students in post-secondary education.

### Information Referral System

This system is organized to provide specific information on needs concerning the provision of services to handicapped students in a college/university setting. Individuals seeking guidance in any of a number of areas will be provided with the names of several individuals within the Association who have expertise in the area of inquiry.

### Employee Exchange

The job exchange is available to members seeking employment in the general area of working with disabled adults. It is also used by employers seeking qualified applicants.

### Publications

The Annotated Bibliography is a compilation of sources important to individuals providing services to handicapped students in post-secondary education. The Annotated Bibliography, which is updated with supplements, is available to members at a reduced cost.

### The AHSSPPE Newsletter

Alert, is published five times a year. Its contributors are members of AHSSPPE. The newsletter includes Association news, items of interest to the handicapped, employment opportunities, campus happenings (from the various campuses that belong to AHSSPPE), and details on the annual AHSSPPE conferences.

### Conference Proceedings

Conference Proceedings are published for the annual conference, and are made available free of charge to conference participants and at a modest cost to others. Past Proceedings are available from 1977, 1978 and 1980.

Reproduced from
The Accessible Institution of Higher Education:
Opportunity, Challenge and Response

The Proceedings of the 1981 AHSSPPE Conference
Association on Handicapped Student Service Programs in
Postsecondary Education (AHSSPPE)
P.O. Box 886; Ames, Iowa 50010 c 1981



General Information on the Association may be obtained by writing:

AHSSPPE
P.O. Box 886
Ames, Iowa 50010

## The Clearinghouse on the Handicapped

The Clearinghouse on the Handicapped was created by the Rehabilitation Act of 1973 to enhance the flow of disability-related information to handicapped individuals and service providers.

### What does the Clearinghouse do?

The Clearinghouse responds to inquiries on a wide range of topics concerning handicapping conditions and related services. We are especially knowledgeable in areas of Federal funding for programs serving disabled people, Federal legislation affecting the handicapped community, and Federal programs benefiting people with handicapping conditions.

If we cannot provide a direct answer, the inquirer is referred to relevant sources of information. The Clearinghouse has done two extensive surveys of national level information providers and has described their information services in detail in the *Directory of National Information Sources on Handicapping Conditions and Related Services*. New developments in the information field are monitored on a continual basis.

Research on state and local level information sources enables the Clearinghouse to refer inquirers with service needs to resources as close to home as possible.

Areas of primary interest to information providers and professionals in disability-related programs are the focus of the Clearinghouse's *Resource Guides*. These include removal of architectural barriers, recreation and leisure for handicapped individuals, and rehabilitation engineering and product information. All *Resource Guides* describe information and funding sources as well as Federal publications.

*Programs for the Handicapped*, a bimonthly newsletter, focuses on Federal activities affecting the handicapped. It is also our link to information users, and contains announcements of all new Clearinghouse publications and services. Subscription to the newsletter is free, as are single copies of all Clearinghouse publications.

### To Use Clearinghouse Services

Everyone is invited to use Clearinghouse services. Inquiries can be made by visit, telephone or letter. A list of current publications is available on request. Users who order publications are asked to include mail labels with their orders.

The information contained in the *Directory of National Information Sources on Handicapping Conditions and Related Services* has been put into a computerized data base which will be made available through Bibliographic Retrieval Services, 1200 Route 7, Latham, N.Y. 12110, (518) 783-1161.

### How You Can Help

To create a network of information providers serving handicapped individuals and professionals working for them, the Clearinghouse needs to be aware of more information operations on the State and local level. Please tell us about your services and your information needs. We will tailor our publication program to your needs and provide technical assistance on request.

**Clearinghouse on the Handicapped**
**Office of Special Education and Rehabilitative Services**
**Room 3106 Switzer Building**
**330 C Street, S.W.**
**Washington, DC 20202**
**(202) 245-0080**

SAMPLE LISTINGS


ERIC®

# CLEARINGHOUSE ON HANDICAPPED AND GIFTED CHILDREN

## PUBLICATIONS LIST

ERIC Clearinghouse for
Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

ERIC

### INFORMATION BULLETIN

____ Please add my name to the mailing list to receive the Clearinghouse information bulletin.

### COMPUTER SEARCH REPRINTS

*(Note: Some titles are abbreviated)*

____ Recreation and Leisure
____ Special Education Teachers
____ Implementation 94-142
____ Independent Living
____ Learning Disabled Adolescents
____ Vocational Education
____ Career Education
____ Severely and Multiply Handicapped
____ Training Regular Class Teachers
____ Media for Regular Teachers
____ Gifted Handicapped
____ Handicapped College Students
____ IEP'S
____ TMR
____ Gifted Elementary
____ Gifted Secondary

Total No. reprints = _____ ____ @ $10.00 each =

### TOPICAL BIBLIOGRAPHIES

For an overview of a general subject, the Clearinghouse provides 34 preselected, preprinted bibliographies. The series spans 17 popular subject areas and disciplines over a 2 year period. The titles contain selected abstracts of the most significant references from *Exceptional Child Education Resources:* Volume 9 (1978); Volume 10 (1979).

- Each bibliography averages 50 to 100 citations.
- Each citation includes publication date, author, title, source, and a 50 to 200 word summary.
- The price for each is $4.50.

| | 1978 Series | 1979 Series |
|---|---|---|
| Attitudes Toward the Handicapped | No. 801 | No. 901 |
| Early Childhood—Identification and Assessment | No. 802 | No. 902 |
| Early Childhood Programs | No. 803 | No. 903 |
| Emotionally Disturbed—Teaching Methods and Programs | No. 804 | No. 904 |
| Gifted—Identification and Assessment | No. 805 | No. 905 |
| Gifted—Programs, Teaching Methods, and Curriculum | No. 806 | No. 906 |
| Learning Disabilities—Identification and Assessment | No. 807 | No. 907 |
| Learning Disabilities—Programs | No. 808 | No. 908 |
| Learning Disabilities—Teaching Methods and Curriculum | No. 809 | No. 909 |
| Mainstreaming | No. 810 | No. 910 |

### FACT SHEETS

The items listed below are one page fact sheets and spot bibliographies on current, high interest topics in special education. They are available in groups of five (5) for $1.00 from the Clearinghouse. If you need multiple copies of any title, you are welcome to reproduce them, but we can provide only one copy of each title.

371 Career Education for the Handicapped
372 Bilingual Education for Exceptional Children
379 Special Education Job Market
380 Federal Resources for Special Education
381 Higher Education for Handicapped Students

HEATH/Closer Look
RESOURCE CENTER
a program of the American Council on Education

Higher Education and the Handicapped / Closer Look Resource Center—a national clearinghouse on postsecondary education for disabled people · Post Office Box 1492, Washington, DC 20013 202/833-4707 (Voice/TTY)

Postsecondary Education?
Ask HEATH/Closer Look

A new project has started which expands the scope of information offered by Closer Look by furnishing information on postsecondary education opportunities for people with physical, mental and emotional disabilities. (This program does not replace Closer Look, but adds to our regular service. We'll go right on providing parents, professionals and advocates with information about services for handicapped children and youth.)

The project — the HEATH/Closer Look Resource Center — is a combined effort of Project HEATH (Higher Education and the Handicapped) and Closer Look, and is funded under a contract with the Department of Education.

The primary goal of the new center is to offer disabled consumers, high school counselors and professionals in the field of postsecondary education, information about resources that will help disabled students participate in education programs and services beyond high school. These include a variety of opportunities, such as colleges, universities, vocational technical schools and adult education programs.

Many students are faced with difficult questions after their high school years. For a person who is handicapped, decisions about the future may be complicated by such concerns as the need for accessibility, financial aid, curricular modifications or overcoming attitudinal barriers. But information about support systems for disabled youth and adults has been limited and locating resources has been difficult.

The HEATH/Closer Look Resource Center helps to bridge this information gap. Project HEATH, coordinated by the American Council on Education has, in the past, provided information to higher education administrators and personnel to assist them in finding ways to serve handicapped students on college campuses. The activities of our two centers are complementary; cooperation will increase effectiveness in opening opportunities for handicappped adults.

The new project produces a quarterly newsletter, "Information from HEATH/Closer Look" (available free by request). It discusses new publications, highlights various postsecondary programs, examines new or pending legislation and shares some questions and answers.

Please write if you feel we can be of assistance to you or others with whom you are concerned. We may not have all of the answers now, but your questions will help us to determine needs and to find solutions. Our address:

HEATH/Closer Look
Box 1492
Washington, D.C. 20013

*A project funded by the U.S. Department of Education*

## AAAS OFFICE OF OPPORTUNITIES IN SCIENCE

In January 1973, the AAAS Board of Directors established the Office of Opportunities in Science, the major purposes of which are:

*to increase the number of women, minority and handicapped persons in the natural, social and applied sciences;

*to increase the kinds of opportunities available to these groups; and

*to increase the participation of minority, women and handicapped scientists and engineers in policy-making, advisory and managerial positions.

To fulfill these purposes, the OOS is involved in many programs and activities. It functions as a clearinghouse on information on women, minorities and the handicapped; it acts as a liaison with other professional organizations to help coordinate equal opportunity efforts; it works with the Scientific Manpower Commission on problems dealing with the recruitment, education and utilization of women, minority and handicapped scientists; and within the AAAS it encourages the increased participation of these groups and the consideration of issues concerning them in all programs and activities of the Association.

The Project on the Handicapped in Science seeks to improve the status and participation of handicapped scientists and to improve science education available to handicapped youth. An ongoing activity is to make professional meetings completely accessible to the physically disabled. Other activities include: the compilation of a resource directory of handicapped scientists and guide for its use by project directors; a study of handicapped scientists' coping strategies; a multi-state lecture tour by a deaf physicist serving as a role model for handicapped students, parents, teachers and counselors; a study and conference on barriers to post-secondary science education for handicapped students, and a newsletter, Access to Science, in conjunction with Tufts R and T Center.

OOS welcomes ideas, suggestions and help from all who are interested.

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Source: Redden, M., Davis, C., and Brown, J. Science for Handicapped Students in Higher Education: Barriers, Solutions and Recommendations. Washington, D.C.: American Association for the Advancement of Science, 1979.
Available from: Office of Opportunities in Science, American Association for the Advancement of Science, 1776 Massachusetts Avenue N.W., Washington, D.C. 20036. AAAS Publication 78-R-2

The AAAS has gathered data from several resources in order to identify barriers to postsecondary science education and to look at methods for overcoming them. This monograph summarizes the findings and recommendations of a conference that was held, and, in addition, the results of related surveys and research of the literature. Useful for individual instructors as well as administrators and counselors.

# New York State Office of Advocate for the Disabled

Prior to Governor Hugh L. Carey's signing the executive order which established the Office of Advocate for the Disabled in 1977, no single state government agency existed to serve the entire disabled community. Instead, responsibility was scattered among more than a dozen agencies, each focusing either on the needs of a particular segment of the disabled population or a particular type of service.

The multiplicity of agencies, programs, laws and regulations dealing with disabled persons often created major obstacles for persons seeking information and services. It also hampered the state's ability to objectively identify and develop programs and priorities responsive to the special needs and problems of it's estimated 2.5 million disabled adults and children.

Creation of an advocate's office – responsible for the dissemination of information, referrals, program coordination and overall service evaluation – was a necessary step toward alleviating such problems. Direct services would continue to be offered by the various agencies, but now individuals – regardless of their disability – would have a single entry point on the state level to a system concerned exclusively with their needs.

The universal, ultimate goal for all persons with disabilities is full integration as participating citizens in community life. Employment in a job for which one is qualified is the key to such integration for most people with disabilities. The office has been created to ensure that everyone who so chooses has equal access to full participation in society.

As a systems advocacy agency, the office's major responsibilities are to:

- Inform the governor, state agencies and the New York State Legislature what the current needs of the disabled citizen are;
- Participate in the formulation of innovative programs which can viably meet these needs, including the identification of possible areas of modification and further coordination of existing programs and services;
- Assist disabled citizens and their families in the formulation of strategies for needs identification and the processes of satisfying these needs; and
- Assist local government, service providers and other advocates in fulfilling their roles in achieving full participation for disabled citizens within the community.

## The Office focuses on five major areas:

- Information and referral – resource and guidance service to disabled citizens and their families, service providers and other community groups;
- Community development – helping localities in developing community-based advocacy systems. Technical assistance in mobilizing local resources in integrating disabled persons into all facets of community living;
- Legislation – work closely with the State Legislature to develop and promote legislation. Inform disabled citizens, service providers and families of disabled citizens and the general public of the state's current policies, programs and services regarding disabled citizens;
- Publications – dissemination of newsletters, brochures and reports to promote understanding of the various functions, policies, issues and strategies affecting disabled persons in the pursuit of full integration in community life; and
- Employment Development – linking state agencies, private providers, business, labor and disabled individuals in promoting employment opportunities for disabled employees as well as meeting the needs of prospective employers.

New York State Office of Advocate
for the Disabled

Agency Building 1, 10th Floor
Empire State Plaza
Albany, New York 12223
(518) 473-4129 (voice only)
(518) 473-4231 (TTY)
or
Two World Trade Center, Room 3712
New York, New York 10047
(212) 938-0186 (voice and TTY)
800-522-4369 (toll free – voice and TTY)

DR. FRANCES BERKO,
State Advocate
N.Y.S. Office of Advocate for the Disabled

# Do You Need Training and Information?



The State Education Department, Office for Education of Children with Handicapping Conditions (OECHC), administers and supports a network of 50 State Training Centers. The centers are called Special Education Training and Resource Centers (SETRC). They are located in the Boards of Cooperative Educational Services (BOCES) throughout the State and in large city school districts. They are the local contact points for obtaining resources, information and training related to the education of the handicapped. Each center disseminates publications, information about training, and other services available from the OECHC, Division of Development Support Services, Bureau of Program Development. The following material is designed to help you to use the services available through the State Training Network.

**What information is available through the centers?**

- Information about the laws and regulations which govern special education
- Information about current books and periodicals on educating handicapped children
- A collection of professional reference materials which are available on loan
- Information about statewide and local assessments of training needs
- Information about special education and related services which are available to the handicapped in the regions
- Information about a collection of more than 300 films on handicapped children which may be borrowed from the State Education Department
- Information about access to computerized data bases
- Information about the latest and most effective instructional media and materials which may be used or adapted for use with handicapped children

**What personnel is available in the centers to provide training and information?**

Each center has at least one Training Specialist who is an experienced special education teacher. Many centers are staffed by two or more trainers.

**Do center staff members respond to individual requests for information and assistance?**

Yes. Trainers may be contacted to consult with educators or parents on a request basis. In some centers, trainers may be able to visit classrooms to offer advice and information.

**Who may use the centers?**

- Administrators
- Special education teachers
- Regular education teachers
- Pupil personnel staff
- Committee on the Handicapped members
- Board of Education members
- Representatives of other public, private and voluntary agencies and organizations which serve handicapped children
- College and university personnel
- Students
- Parents of handicapped children including those of preschool age

**Training is available for:**

- Administrators
- Regular Education Teachers
- Special Education Teachers
- Physical Therapists, Speech Therapists
- Resource Room Personnnel and Itinerant Teachers
- Boards of Education
- Parents of Handicapped Children
- Committee on the Handicapped members

**What State-level resources are available to the centers?**

- State-level training on materials and methods which may be duplicated by local trainers
- Copies of training materials which are developed/purchased by the Bureau of Program Development for centers
- State Education Department information bulletins, newsletters, guidelines, handbooks, manuals, fliers
- Access to data bases
- Access to data on statewide assessments of training needs
- Consultation and technical assistance from State Education Department personnel
- Funding of some center activities
- State-provided training to specific populations working with the handicapped

**How can I find out more about the State Training Network?**

Contact:

New York State Education Department
Bureau of Program Development
Room 1061, Education Building Annex
Albany, New York 12234 (518) 474-2251

ERIC Clearinghouse for Junior Colleges
8118 Math-Sciences Building
University of California
Los Angeles, California 90024
OCT 7 1983